



# **NOOTROPIC    ENCYCLOPEDIA**

## **DISCLAIMER**

Information provided in this ebook is meant to assist you in understanding nootropics and how they work. The purpose of this publication is to help you choose the best solutions for enhancing your cognitive capacity, memory, concentration, without putting your health at risk.

The Content is not intended to be a substitute for professional medical advice, diagnosis, or treatment.

All the information in this ebook is based on our research and have done our best to provide accurate information however please note that unintentional errors are a possibility.

Before starting a supplementation routine, it is highly recommended to speak to your healthcare professional.

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# ACETYL-L-CARNITINE

Acetyl-L-Carnitine (ALCAR) is a true multi-purpose supplement that benefits both brain and body. A potent antioxidant and neuroprotectant known for its powerful nootropic properties, ALCAR also enhances energy and alleviates the effects of aging. It works best in combination with other smart drugs, and many consider it a key element in nootropic stacks.

## SUMMARY

Acetyl-L-Carnitine, or ALCAR, is a form of the micronutrient L-carnitine, which is a derivative of the amino acid lysine. The body naturally produces L-carnitine, which can also be synthesized from animal proteins in the diet. While studies suggest that actual carnitine deficiency is relatively rare in healthy people with no metabolic disorders, supplementation has nonetheless proven to be of substantial benefit in many ways, from promoting heart health to enhancing brain function.

ALCAR is one of several forms of L-carnitine supplements, all of which have been extensively studied and shown to offer major physical and mental benefits. ALCAR, which is L-carnitine to which an acetyl group (-COCH<sub>3</sub>) has been added, is thought to be the [most bioavailable form of L-carnitine](#). Unlike other forms of L-carnitine, which help convert fat to energy in the body proper, ALCAR readily crosses the blood-brain barrier and acts within the brain itself. Its primary actions are related to brain function.

ALCAR is effective in many respects when taken alone, but its nootropic properties are most pronounced when it is taken in combination with other nootropics. In many cases the combination of ALCAR with other nootropics is mutually potentiating, making all the compounds in the combination or stack work better and more efficiently than they would separately.

Other forms of L-carnitine supplements include L-carnitine L-tartrate (LCLT), typically used to enhance physical performance, and glycine propionyl L-carnitine (GPLC), which is primarily used to alleviate blood flow issues. The only L-carnitine variant that has nootropic capabilities, ALCAR provides both L-carnitine and acetyl groups, which are molecule clusters that may be used in the formation of the "learning neurotransmitter," acetylcholine.

ALCAR is safe, extremely well-tolerated, affordable, and readily available without a prescription as a nutritional supplement.

## **BENEFITS AND EFFECTS**

Research has proven that that ALCAR benefits both the brain and body in a surprising variety of ways, from enhancing cognitive abilities to increasing energy, reducing pain, and even preventing damage from alcohol consumption.

### **Cognitive Enhancer**

ALCAR has repeatedly been proven to improve and enhance brain function. Studies show that it successfully [reduces mental fatigue and enhances cognitive function](#) and [improves learning ability](#). ALCAR's primary nootropic function is the enhancement of the acetylcholine system. It is believed to be a promote the production of acetylcholine, the neurotransmitter associated with memory and learning. ALCAR supplementation is known to enhance the action of other nootropics like such as those in the racetam family.

### **An Effective Neuroprotectant**

Because of its potent antioxidant properties, ALCAR [acts as a neuroprotectant](#), preventing and even repairing damage caused by free radicals that scavenge and damage brain cells. It also helps the brain rid itself of other toxins and is thought to reduce cell death due to excitotoxicity, a pathological process triggered by the overactivation of glutamate receptors. ALCAR improves the neural network by strengthening nerves and signal receptors and has even been shown to [protect the brain against the harmful effects of drinking alcohol](#).

### **Potential Treatment for Age-related Disorders**

One of ALCAR's most exciting prospects is as a treatment for age-related neurological disorders, including Alzheimer's Disease. It has been shown to effectively slow decline in Alzheimer's patients and [reduce age-related memory loss](#). Other studies showed that ALCAR helps restore ambulatory capability in the aged and acts as a mood elevator and anti-depressant in the elderly.

## Physical Health Benefits

Nootropic capabilities are only part of what ALCAR has to offer.

- ▣ There is significant evidence that ALCAR can be of substantial benefit to people with physical disorders typically associated with aging, including high blood pressure, diabetes, and metabolic syndrome.
- ▣ It has proven to be effective in treating nerve pain, improving kidney function, and promoting heart health.
- ▣ ALCAR is sometimes used to treat male infertility and ameliorate the symptoms of andropause and erectile dysfunction. It is also used to combat Peyronie's disease, an inflammatory condition that affects the penis.
- ▣ It is currently being tested as a potential treatment for chronic fatigue syndrome and as an adjunct treatment for fatigue in cancer patients.

## HOW IT WORKS

Like all L-carnitine variants, ALCAR is synthesized primarily in the liver and kidneys and then transported to other tissues. ALCAR has excellent bioavailability and is readily absorbed by the gastrointestinal tract. Once absorbed its actions differ considerably from those of other forms of L-carnitine, which don't cross the blood-brain barrier. The acetyl groups that make ALCAR unique enable it to cross the blood-brain barrier readily and rapidly, and ALCAR's most important functions take place in the brain.

### Increased Production of Important Neurotransmitters

One of ALCAR's most significant nootropic benefits involves the acetyl groups, which are thought to provide the basis for the synthesis of the neurotransmitter acetylcholine. Sometimes referred to as "the learning neurotransmitter," acetylcholine is largely responsible for learning, memory, and cognitive function. Increased levels of acetylcholine are associated with enhanced cognitive abilities, and low levels of this important neurotransmitter increase the risk of neurological disorders like Parkinson's and Alzheimer's diseases.

ALCAR has also been shown to increase levels of norepinephrine and serotonin, crucial neurotransmitters that play a major role in mood and brain function. The ability to increase neurotransmitter production is one of the primary ways that

ALCAR complements nootropics like the racetams, which enhance the action of neurotransmitter receptors in the brain.

### **Enhanced Brain Metabolism**

ALCAR also targets brain metabolism, boosting cellular energy and acting as a potent neuroprotectant. Its significant antioxidant properties combat the effects of cellular oxidation and reduce the number of damaged cells in the brain, making ALCAR a powerful anti-aging agent.

Damaged fat cells known as lipofuscin – called “age spots” when they appear on the skin – also occur in the brain, and are strongly associated with age-related neurological disorders, loss of energy, and poor memory. By helping the brain eliminate these damaged cells ALCAR both boosts brain function and significantly reduces the risk of neurodegenerative disorders. It has also been shown to prevent brain deterioration during periods of stress.

### **Powerful Neuroprotection**

One of the most important ways that ALCAR safeguards the brain and improves cognitive function is by strengthening the protective myelin sheath that surrounds the nerves in the brain. Weakening or damage to the myelin sheath has a severe adverse effect on vision, hearing, balance, coordination, and general brain function.

ALCAR has also been shown to protect membrane signal receptors in the brain and help keep neurons healthy and functional. This protective ability not only increases the ability to form and maintain new memories, but it is also another way in which ALCAR complements and potentiates other nootropics.

### **Actions in the Body**

ALCAR works in the body as well as the brain, performing many of the same functions as L-carnitine. While the conversion of fat to energy isn't one of ALCAR's primary benefits, it does increase metabolic efficiency and provides many of the same energy-related benefits as other L-carnitine variants. ALCAR has also been shown to be particularly effective at [reducing hypertension](#) and [lowering insulin resistance](#).

## DOSAGE

Recommendations for the daily dosage of ALCAR vary considerably, starting with 250-500 mg per day. A dose of 500 mg per day, taken all at once or split into smaller doses, is considered a good starting point for most healthy adults. From that point, dosage can be adjusted as needed to realize maximum results. The elderly may benefit from higher doses.

For peak daytime brain function, the initial dose of ALCAR should be taken in the morning, though some users say ALCAR works best when split into two or more doses taken at intervals throughout the day. Taking ALCAR late in the evening can result in disruption of the normal sleep cycle. ALCAR can be taken on an empty stomach, but users who experience gastrointestinal upset report that it can be minimized or avoided by taking ALCAR with food.

## STACKING

ALCAR's effects are truly potentiated when combined with other nootropics. It is commonly included in stacks that feature nootropics in the racetam family, allowing them to each function to their fullest potential. Since ALCAR works in tandem with the acetylcholine system, it may also be a good idea to include a choline precursor, such as Alpha GPC, in your stack.

### ALCAR and Piracetam Stack

#### 1x per day

- 500 mg [ALCAR](#)
- 4.8 g [Piracetam](#)
- 300 mg [Alpha GPC](#)

## SIDE EFFECTS

ALCAR is exceptionally safe and well tolerated. Side effects are rare; those that are reported are minor and are often associated with high dosage.

Nausea, the most commonly reported side effect, can usually be addressed by taking ALCAR with food. Headaches, the second most commonly reported side

effect, may be attributable to excess choline. Many users who experience a headache when taking ALCAR say that reducing the amount of choline in their regimen eliminates them.

## WHERE TO BUY

There is no shortage of available options on Amazon.com when buying ALCAR so be sure to get a quality supplement such as [NOW Foods Acetyl L-Carnitine from Amazon](#).

Alternatively, ALCAR can be purchased directly from [AbsorbYourHealth.com](#), a reliable supplier of specialty nootropic supplements.

## CLOSING THOUGHTS

ALCAR is a remarkable natural supplement that offers a host of benefits for both brain and body.

A powerful brain booster in its own right, it works well with other nootropics and can act as a powerful complement and potentiator. It's safe, affordable, very well tolerated, and readily available without a prescription.

For anyone who's interested in better health, better cognitive abilities, and better defense against aging, ALCAR is a supplement to try.





# ADRAFINIL

Adrafinil is a wakefulness-promoting supplement that also happens to have impressive nootropic properties. Used responsibly, it can be an effective tool for supporting lengthy mentally demanding tasks.

## SUMMARY

Adrafinil is a synthetic nootropic supplement that acts as a central nervous system stimulant, preventing fatigue and increasing energy and wakefulness. But adrafinil does more than just fight sleepiness; it has also been shown to enhance mood, motivation, and reaction time, and its potential cognitive benefits include improved memory, heightened focus over longer periods, and even increased learning capacity.

Discovered in the 1970s by French pharmaceutical company Lafon Laboratories, adrafinil was marketed in Europe under the brand name Olmifon. Following its introduction in 1986, it was prescribed throughout Europe, mainly as a treatment for narcolepsy and other sleep disorders that cause excessive daytime sleepiness.

Production of Olmifon was discontinued in 2011 after the French regulatory agency withdrew marketing approval of the drug. However, adrafinil is unregulated in the US and Canada and is widely used off-label to fight fatigue, enhance energy and as a cognitive enhancing nootropic.

## BENEFITS AND EFFECTS

Though adrafinil was originally developed for its eugeroic or wakefulness-promoting properties, it has been shown to produce significant cognitive benefits as well. For people who experience life-disrupting daytime fatigue because of shift work or sleep disorders like insomnia and sleep apnea, adrafinil can promote the physical and mental energy needed for an active life. It can also improve mental clarity, focus, and retention, making it a favorite with students.

Adrafinil has been shown to be a very effective general stimulant, preventing daytime sleepiness and dramatically increasing both energy and attentiveness without the hyperactivity and jitteriness commonly associated with stimulants. In

fact, many users report a heightened sense of well-being, a reduction of stress, and general enhancement of pleasure – effects that may be attributable in large part to adrafinil's stimulation of dopamine receptors.

However, general stimulant effects are only part of Adrafinil's benefits. In addition to promoting wakefulness and increasing energy, adrafinil is strongly associated with a number of nootropic effects, including increased learning capacity, better memory, and faster recall. Users have reported that adrafinil improves their ability to focus and maintain concentration, enhances mental clarity, and makes it easier to do mentally taxing work over a long period of time.

## HOW IT WORKS

Adrafinil acts on the adrenergic system, the part of the nervous system that releases adrenaline. Typically thought of in terms of the “fight or flight” response, a rapid release of adrenaline boosts energy and increases alertness. While not all of adrafinil's actions are completely understood, it is believed to replicate the positive effect of an adrenaline release by boosting adrenergic neurotransmitters.

Technically, adrafinil is a synthetic prodrug or precursor, which means that is initially pharmacologically inactive but is converted to an active form inside the body, through a normal metabolic process. Adrafinil is metabolized in the liver, where it is converted to [Modafinil](#), a USFDA-approved treatment for wakefulness disorders sold under the brand names Alertec, Modavigil, and Provigil. The pharmacological effects of adrafinil are virtually identical to those of Modafinil.

Though the exact chemical mechanisms of adrafinil are not entirely clear, [researchers hypothesize](#) that in its metabolized form it acts as an adrenergic receptor agonist. One of its primary actions is thought to be the increased production and release of the neurotransmitter hypocretin, which in turn can trigger the increased production of dopamine, histamine, and norepinephrine. All of these neurotransmitters and hormones are directly related to wakefulness and energy levels, which largely explains adrafinil's stimulant properties.

The powerful mood and cognitive effects of adrafinil are believed to be created by several actions, including the positive modulation of glutamate receptors and inhibiting the breakdown of glutamate. This can result in enhanced neuronal communication, which improves memory and focus and creates better general cognitive function.

Adrafinil is also believed to stimulate the release of serotonin, which enhances mood by helping to lessen anxiety. It may also inhibit the breakdown of dopamine, a neurotransmitter that plays an enormous role in the brain's reward and pleasure centers as well as emotional responses.

## DOSAGE

Dosage recommendations vary, but a range of 150 to 300 mg daily is widely accepted as safe and effective. It is a very powerful nootropic, so it's a good idea to give the body a chance to adjust by starting with a lower dose and gradually increasing it as needed.

Adrafinil should be ingested on an empty stomach. Because of its potent wakefulness-inducing properties, it should be taken in the morning to allow for normal night's sleep. Effects can typically be felt within an hour, and the duration of a single dose can be 3-4 hours.

Taking adrafinil on a long-term basis is inadvisable, as it could potentially affect liver function. Using adrafinil on a cycle (for instance, two weeks on, one week off) is recommended. If you do plan to take adrafinil for an extended period, it's important to have your liver function closely monitored by a medical professional.

Adrafinil has been banned by the World Anti-Doping Agency as a nonspecific stimulant compound.

## STACKING

Adrafinil works efficiently on its own, but it also stacks very well with other nootropics, including piracetam, phenylpiracetam, and Noopept.

### Adrafinil and Noopept Stack

Stacking adrafinil with Noopept is a popular combination that is recommended for extended periods of mental work where focus and attention are needed.

#### As Needed (not more than twice per day)

- 150 mg [Adrafinil](#)
- 10 mg [Noopept](#)

## **SIDE EFFECTS**

Adrafinil has been used safely and without side effects by millions, but some potential side effects have been documented and they range from mild to serious. The most common side effects of adrafinil are headaches, dizziness, nausea, and stomach discomfort. The most serious side effects are related to liver function, and there is potential for increased risk of high blood pressure and heart problems, particularly when taking higher doses of adrafinil. If you experience any side effects when taking adrafinil you should stop taking it and seek medical advice.

## **WHERE TO BUY**

Adrafinil is legal for purchase in the USA and Canada. For other countries, please research the laws in your country.

There are only a handful of suppliers for adrafinil and it is advised to only purchase from reputable sellers. We recommend you can purchase adrafinil online via [AbsorbYourHealth.com](https://AbsorbYourHealth.com) as they are a trusted seller of nootropics and their supplements are all verified by 3rd party labs to ensure purity.

## **CLOSING THOUGHTS**

Adrafinil's unique combination of mental and physical benefits makes it an invaluable supplement for anyone who needs or wants more energy, stamina, and mental acuity. It's a powerful nootropic with potent stimulant properties and used responsibly it can safely offer the boost you need to make the most of an active life.



# ALPHA GPC

Alpha GPC is a natural choline compound that works two ways: on its own it's a respected nootropic known as a potent memory booster, and in combination with other nootropics is a powerful potentiator that can take cognitive enhancement to a new level. It's the choline source of choice for millions of nootropic users, considered by many to be an essential component in every stack.

## SUMMARY

Alpha GPC, also known as L-Alpha glycerylphosphorylcholine or choline alfoscerate, is a natural nootropic that works both on its own and in combination with other nootropics. It is naturally present in the body in small amounts and is commercially manufactured as an extract of purified soy lecithin. Though there are a few significant dietary sources of Alpha GPC (dairy products, organ meats, and wheat germ) concentrations achieved through dietary intake are well below those achieved through supplementation.

An intermediate in phospholipid metabolism, Alpha GPC works rapidly and reliably, primarily by delivering essential choline to the brain.

Alpha GPC has significant nootropic properties, including memory enhancement and protection against brain aging. Extensive clinical trials involving thousands of participants have shown it to be [an effective treatment for age-related memory loss](#) associated with a variety of disorders, including Alzheimer's disease, vascular dementia, and stroke. It also has [neuroprotective anti-aging capabilities](#) and studies suggest [it may also be useful in the treatment of anxiety](#).

It has non-nootropic benefits as well, including the ability to enhance cell membrane health and promote rapid recovery after physical exertion. Preliminary studies suggest that [it may also act as a dopaminergic](#), promoting the release of the hormone dopamine, meaning it may serve as a potential treatment for neurodegenerative conditions such as Parkinson's disease and may also be a mood enhancer.

But for many nootropic users, the real strength of Alpha GPC is in its potentiating properties when taken in combination with other supplements. The additional

choline that Alpha GPC makes available to the brain can significantly amplify the cognitive enhancement effects of racetams. It can also prevent the minor but annoying headaches that are one of the few side effects associated with racetam nootropics.

Alpha GPC is regulated in Europe, where it is prescribed for the treatment of Alzheimer's disease and sold under the brand names Gliatilin and Delecit. In the US it is considered a dietary supplement and is available without a prescription.

## BENEFITS AND EFFECTS

Many benefits may be reaped from taking Alpha GPC regularly. Here is a list of the different Alpha GPC benefits:

- ▣ **Memory enhancement:** Alpha GPC is best known for its ability to improve memory. This effect is mainly due to the increased amount of choline it makes available for conversion to the neurotransmitter acetylcholine, which is strongly associated with cognitive functions and the ability to form and recall memories. Studies show it is an effective treatment for memory loss caused by multiple age-related disorders, including Alzheimer's disease and various forms of dementia. It has even proven to be [effective at restoring memory in healthy young volunteers following temporary chemically-induced amnesia](#).
- ▣ **Energy booster:** Though it is best known for its memory and general cognitive enhancement effects, Alpha GPC may also act as a mild stimulant. Some users say it provides a lasting energy boost when taken before a workout.
- ▣ **Neuroprotectant:** Alpha GPC protects and supports overall brain health by encouraging the development of new brain cells and enhancing the body's ability to repair damaged cell membranes. This property is a particularly important anti-aging benefit.
- ▣ **Increased strength and rapid post-exertion recovery:** Because it stimulates the production of human growth hormone, Alpha GPC is a valuable supplement for athletes or anyone who wants to perform better, build lean muscle mass, feel peak energy during a workout and recover quickly afterward. A pilot study indicated that [a 600 mg dose of Alpha GPC taken 90 minutes before bench pressing increased power by 14%](#).
- ▣ **Mood and mental stamina:** Many users report that taking Alpha GPC gives them more mental energy and improves their mood. This may be explained,



at least in part, by the additional choline the supplement provides, which increases alertness and enhances clarity of thought. It may also have to do with Alpha GPC's ability to stimulate the production of human growth hormone, which has energizing, anti-aging, and longevity effects.

- ▣ **Choline source in nootropic stacks:** Alpha GPC is a preferred choline source for many nootropic users, who find its rapid and reliable action a perfect pairing with racetam supplements. In combination with other nootropics, it provides ample choline to achieve optimal cognitive enhancement effects and can prevent the minor headaches sometimes reported as racetam side effects.

## HOW IT WORKS

Alpha GPC is structurally composed of choline, glycerol, and phosphate and is considered a cholinergic, or primary choline storage form. Its mechanism of action has been extensively studied and is well understood, though the manner in which it affects some neuronal functions remains unclear.

A water soluble supplement, Alpha GPC is both fast acting and highly bioavailable when taken orally. It crosses the blood-brain barrier soon after ingestion, and most users notice effects within an hour. Following absorption, it metabolizes into a combination of choline and a byproduct called glycerophosphate.

The additional choline made available by Alpha GPC is at the heart of its considerable nootropic capabilities. Choline is a precursor of the neurotransmitter acetylcholine, which is strongly associated with a host of cognitive functions including memory formation and recall, learning ability, and concentration/focus. By making additional choline available to the brain Alpha GPC stimulates the production of acetylcholine, which is also believed to act as a neuroprotectant.

The additional choline that Alpha GPC provides also makes it a valuable part of a nootropic stack, particularly in combination with racetam class supplements such as piracetam, pramiracetam, oxiracetam, aniracetam. These nootropics work by stimulating acetylcholine receptor sites, which makes maintaining a sufficiency of choline in the brain crucial; when insufficient choline is present, the brain cannot synthesize enough acetylcholine to satisfy the stimulated receptor sites and in turn, the racetams cannot achieve optimal results. Additionally, insufficient choline can lead to the minor but annoying side effect known as a "racetam headache."

Alpha GPC has other functions as well, though their processes are not all as completely understood as the manner in which it delivers choline to the brain.

- ▣ It is known to act as a neuroprotectant, maintaining neuronal health and preventing damage. It is also believed to improve synaptic signaling.
- ▣ Alpha GPC also appears to work in tandem with the pituitary glands to increase the production of somatotropin or HGH (human growth hormone), which stimulates cell growth, reproduction, and repair. This function makes Alpha GPC valuable to athletes, improving recovery time and increasing strength and lean muscle mass. HGH also has important anti-aging and longevity impact.
- ▣ Alpha GPC also serves as a precursor for phospholipids in neural membranes and is believed to improve neuronal functioning by improving neuronal membrane fluidity.

## **DOSAGE**

For nootropic stack use, we recommend a dose of 300-600 mg to start out and then to increase from there if you decide you would benefit from more.

Alpha GPC is generally well tolerated when taken at recommended dosages. For most adults the range of acceptable dosage is fairly wide; cumulative daily dosage of 300-1200 mg taken in one or two doses has been documented as safe and effective.

As is the case with all supplements, it is wise to start with the lowest possible effective dose and build up gradually as needed.

## **STACKING**

Alpha GPC is an excellent choline source for use in stacks with other nootropics, particularly the racetams.

### **Alpha GPC, Noopept, Aniracetam Stack**

Here's an example of an Alpha GPC stack that includes the popular nootropic Noopept and a racetam, aniracetam. This stack is designed for overall cognitive enhancement.

### 1-2x per day

- 250 mg [Alpha GPC](#)
- 10 mg [Noopept](#)
- 750 mg [Aniracetam](#)

Review our [article on how to create a nootropic stack](#) for a general primer on basic combinations, ratios, and tips on designing your own nootropic stack.

## SIDE EFFECTS

While Alpha GPC is both safe and well tolerated in healthy adults, some side effects have been reported. Users have occasionally experienced headaches, fatigue, nervousness, nausea, diarrhea and gastrointestinal distress. In addition, this supplement can result in dizziness and low blood pressure in some individuals. If you are prone to hypotension, you should consult a medical professional before taking Alpha GPC.

Though no overdoses have been documented, adverse side effects are more commonly reported among users taking high dosages.

Alpha GPC is known to interact adversely with scopolamine, which is used to treat motion sickness, post-operative nausea, and irritable bowel syndrome. Those using scopolamine are advised to avoid Alpha GPC.

Little research has been done on Alpha GPC's effects on pregnant women, so those who are pregnant or nursing are advised to refrain from use.

## WHERE TO BUY

The most convenient place to buy Alpha GPC is Amazon, as they have the best quality and the lowest price. They have many options to choose from, however, we recommend the following two brands for their high-quality products:

- [Jarrow Formulas Alpha GPC, 300mg, 60 Vegetarian Capsules](#) – Jarrow Formula's has proven time and time again that they make excellent quality products, ship fast, and work effectively.
- [Now Foods Alpha GPC 300mg, Veg-Capsules, 60-Count](#) – Now Foods is another reputable brand you can trust.

Alternatively, you can buy Alpha GPC from [AbsorbYourHealth.com](https://AbsorbYourHealth.com), our recommended supplier of nootropic supplements.

## **CLOSING THOUGHTS**

Alpha GPC is a safe, well-tolerated, and highly effective source of choline. It has been the subject of decades of research and is recognized worldwide as a powerful memory enhancer, prescribed by physicians throughout Europe for a variety of memory disorders.

In addition to being a potent nootropic in its own right, Alpha GPC is also a perfect addition to many other supplements, particularly those like the racetams which depend on a sufficiency of choline in order to achieve optimal results.

It also stimulates the production of HGH, which can improve strength, shorten recovery time following exercise, and encourage the building of lean muscle mass, making it an invaluable supplement for athletes or anyone with an active lifestyle.

For anyone who is interested in improving their memory, physical strength, and vitality, or achieving the best results possible with nootropic supplements, Alpha GPC is an excellent choice.



# ANIRACETAM

Aniracetam is a popular multi-faceted nootropic supplement that enhances cognition as well as overall mood. It is considered substantially more potent than its relative piracetam. First developed in the 1970s, aniracetam has stood the test of time and is a favorite choice for many.

## SUMMARY

Aniracetam is a popular choice among nootropic users for its ability to enhance cognition while reducing anxiety and boosting mood. It's also moderately priced and has little to no reported side effects when taken at recommended dosages.

Aniracetam is chemically classed as a racetam (a drug that shares a pyrrolidone nucleus), and like most racetams, it works to a large extent by modulating neurotransmitters.

Here are some of aniracetam's highlights:

- ▣ 8x more potent than piracetam
- ▣ Increases literary fluidity and learning of abstract concepts
- ▣ Ampakine nature causes increased memory retention
- ▣ Anxiolytic/mood enhancer
- ▣ Creativity booster
- ▣ Vision appears sharper, more vivid
- ▣ Improves right brain functioning

The majority of people that have taken aniracetam report that its anxiolytic and mood enhancing effects are notable. Users report an increase in social confidence and improved verbal fluency.

Despite aniracetam being fat soluble, which often indicates a slower breakdown with lasting effects, it only has a half-life of 1-3 hours, meaning its effects are short lived compared to some other nootropics. For this reason, it may be preferable to dose it 2-3 times a day, as necessary.

## BENEFITS AND EFFECTS

Aniracetam's [well-documented positive mood and anti-anxiety properties](#), combined with powerful cognitive enhancements and a demonstrated lack of side effects, make it one of the most popular nootropics on the market. While some users report an initial feeling of mental foggy, the effect is usually temporary and within a day or two aniracetam's true nootropic nature starts to have a noticeable effect.

In addition to generally elevating mood and lessening anxiety, aniracetam can enhance creativity while improving verbal fluency, comprehension, and memory retention. Users have reported a distinct feeling of calm and relaxation along with increased learning capacity, greater social ease and fluency, and better focus and attention to mental tasks over longer periods. There are also some reports that visuals may seem enhanced by aniracetam, appearing deeper and more vivid.

While immediate acute benefits are anecdotally reported, studies involving individuals with senile cognitive disorders demonstrated [significant improvements over placebo at 4 and 6 months](#).

Aniracetam is fat soluble and is metabolized in the liver. Though it is fast acting, crossing the blood-brain barrier in as little as 30 minutes, it has a relatively brief half-life of just one to three hours so multiple doses over a period of hours may be needed to maintain effects.

## HOW IT WORKS

Though not all of its exact mechanisms of action are completely understood, aniracetam has been extensively studied, and it has been shown to modulate the following important neurotransmitters:

**Acetylcholine** – Aniracetam improves general cognition by enhancing activity throughout the acetylcholine system, which plays a pivotal role in memory, attention span, learning speed and other cognitive processes. It works by binding to acetylcholine receptors, inhibiting receptor desensitization and promoting the synaptic release of acetylcholine.

**Dopamine and Serotonin** – Aniracetam improves mood, boosts energy, and lessens anxiety by increasing levels of dopamine and serotonin. By binding to

dopamine and serotonin receptors, aniracetam inhibits the breakdown of these important neurotransmitters and restores optimum levels of both, making it an effective mood enhancer and anxiolytic (anti-anxiety) agent.

**Glutamate Transmission** – Aniracetam is uniquely effective at improving memory and information storage because of the way that it enhances the transmission of glutamate, the neurotransmitter that plays the primary role in neural activation. By binding to and stimulating the AMPA and kainate receptors, glutamate receptors strongly associated with information storage and the creation of new memories, [aniracetam improves neuroplasticity in general and long-term potentiation in particular](#).

## DOSAGE

While individual requirements vary, a dosage of 750-1500 mg is typically accepted as both safe and effective, though doses of up to 3000 mg daily have been documented as well-tolerated. It is wise to start with the minimum effective dose and gradually increase as necessary.

One human study involving individuals with senile cognitive disorders reported benefits over placebo at [1500 mg/day](#).

Because of its relatively brief half-life of one to three hours, dosage may have to be repeated at intervals to maintain effects.

Like most nootropics in the racetam family, the effects of aniracetam may diminish if too much is present in the system, so dosage should be monitored closely.

## STACKING

Like most racetams, aniracetam works well on its own or in combination with other nootropics. Here are some common aniracetam stacks to consider.

### Aniracetam and Choline Stack

The addition of a supplemental choline source usually recommended when taking racetams, such as aniracetam. Choline, an essential nutrient which we consume in our diet, is a precursor to the neurotransmitter acetylcholine which responsible for various brain functions such as memory.



Supplementing a high-quality, bioavailable source of supplemental choline, such as alpha GPC or citicoline, may have nootropic effects of its own by ensuring the availability of the necessary building blocks for synthesizing acetylcholine.

This process is especially relevant when taking aniracetam since it works in part by stimulating the cholinergic system. Supplementing choline ensures that there is enough in your system to maximize aniracetam's effects while mitigating the potential common side effects that may result in the lack of acetylcholine in the brain such as headaches.

#### 1x-2x per day

- ▢ 750 mg [Aniracetam](#)
- ▢ 300 mg [Alpha GPC](#)

### The PAO Stack

The PAO stack, an acronym for *piracetam*, *aniracetam*, and *oxiracetam*, is a classic stack that involves combining these three popular nootropics. Stacking aniracetam with piracetam and oxiracetam strengthens the perceived effects of all the components in the stack and could potentially extend the period of which the benefits are experienced. Including piracetam may also intensify aniracetam's anti-depressive and anti-anxiety properties. As previously mentioned, it's also a good idea to include a choline source.

Before attempting a stack this complex, it is recommended that you have experience with the individual components of the stack before combining them. Only consider this stack once you are familiar with each of their respective effects and how you react to them. Also remember when combining racetams, or nootropics in general, you should use less than you'd usually dose if taken on their own because most nootropics have synergistic effects.

#### 1x-2x per day

- ▢ 1,600 mg [Piracetam](#)
- ▢ 400 mg [Aniracetam](#)
- ▢ 400 mg [Oxiracetam](#)
- ▢ 300 mg [Alpha GPC](#)

## SIDE EFFECTS

When taken at recommended dosages, aniracetam produces very few documented side effects, and those that are reported are both minor and temporary. The most frequently reported side effects of aniracetam are headaches and mild nausea, both of which can often be successfully addressed by the addition of a choline source.

High doses of aniracetam can result in a feeling of excessive nervousness, digestive discomfort, or both. If either of these effects occurs, try reducing dosage. Some users report a loss of inhibition when taking aniracetam; while not necessarily an unwelcome side effect, a sudden feeling of loss of inhibition could be surprising and perhaps unsettling (especially in retrospect).

Each user should carefully monitor their response while taking aniracetam or any nootropic to ensure that the results are as expected and as wanted.

## WHERE TO BUY

Aniracetam can only be bought from a select few online vendors. Only buy from trusted sources to ensure you are getting a pure product.

We recommend you purchase your aniracetam from [AbsorbYourHealth.com](https://AbsorbYourHealth.com) as they specialize in high-quality nootropics and all their batches tested for purity by 3rd party laboratories.

## CLOSING THOUGHTS

Aniracetam's uniquely diverse effects make it a truly balanced nootropic; it improves mood and promotes calmness, easing social anxiety and enhancing performance (especially useful for public speakers, performance artists, or anyone who is ill at ease in groups). It can also markedly sharpen cognitive acuity so that learning is easier and faster it enables better focus and concentration over longer periods, making it popular with students.

Users routinely report that aniracetam gives them a creativity boost, and many also report that visual stimuli are more enjoyable when taking aniracetam.

All in all, aniracetam provides quite a package of benefits in a form that's remarkably well tolerated and with very few associated side effects.



# ASHWAGANDHA

Ashwagandha is an ancient Ayurvedic medicine used for millennia as a tonic and rejuvenator. New research confirms its capability as an exceptionally effective anti-stress agent and brain protectant, and is quickly becoming a key component in many nootropic stacks.

## SUMMARY

The ashwagandha plant (or *withania somnifera*) is native to India and northern Africa, where it is traditionally considered a restorative. Ashwagandha is a Sanskrit word that translates to “smell of a horse,” which is thought to refer to both the odor of the plant’s roots and to the recuperative properties of the medicine, believed by Ayurvedic practitioners to confer a stallion-like vigor.

Ayurvedic medicine used ashwagandha as a treatment for a startling variety of specific problems, ranging from constipation to snake bite, but it was most typically prescribed to extend longevity, increase sexual function, or help patients recover from other illnesses. This tonic capability explains why it is sometimes referred to as Indian ginseng, but in reality, the two plants are completely different.

For modern users who are rediscovering this ancient traditional treatment, ashwagandha is a valuable brain-booster that improves cognition by fighting the effects of stress and helping with mood management.

New research confirms that it’s a promising adaptogen that can help prevent and ameliorate the effects of stress, and many users find that it’s also an effective anxiolytic that reduces anxiety, enhances mood, and relieves insomnia and other sleep problems.

## BENEFITS AND EFFECTS

Much remains to be learned about ashwagandha, but a growing body of research indicates that it’s a safe and effective supplement that has great potential for protecting and enhancing cognitive function as well as general health and well-being.

## Reduce Anxiety and Depression

Though most often used in traditional medicine as a tonic to help build strength and speed recuperation, ashwagandha is best known to modern users for its documented ability to fight stress and anxiety. In this capacity, it is both a health and immune system protectant that blocks the damaging effects of excess cortisol, as well as a powerful nootropic tool that enhances mood and cognition.

Clinical trials confirm that ashwagandha has powerful anxiolytic or anti-anxiety effects, [capable of reducing both generalized and social anxiety in patients diagnosed with generalized anxiety disorder](#), but particularly effective in the context of chronic stress. Human studies also show that it has potential as a [treatment for depression and panic disorder](#).

One of the most promising effects of ashwagandha is its ability to protect and promote overall health and well-being by reducing the levels of the “stress hormone,” cortisol, throughout the body. A 60-day regimen of ashwagandha was shown to [effectively reduce levels of serum cortisol](#) in patients with chronic anxiety and mental stress. This is a very important finding because high cortisol levels are strongly associated with a host of negative health implications, ranging from impaired immune function and bone density to weight gain, high blood pressure, and heart disease.

## Cognition Enhancing Effects

There are limited studies on ashwagandha directly improving memory and cognitive abilities however research has repeatedly demonstrated that [anxiety can be a major factor in diminished cognitive ability](#), substantially impairing concentration, focus, and memory.

Stress and depression can actually have a negative effect on the body's systems, including those in the brain itself.

Reducing anxiety and normalizing the reaction to stress are key to maximizing cognition.

Individuals that are anxious, stressed, or depressed, will likely benefit the most from ashwagandha's cognitive enhancing effects.

## Treatment for Various Health Issues

Ashwagandha has also been shown to have potential as a treatment for a variety of disorders.

**Arthritis:** A 2015 Indian study involving more than 100 patients with rheumatoid arthritis indicated that after taking ashwagandha for several weeks, more than half the participants had [an observable decrease in arthritic symptoms](#), including pain, mobility problems, and tender and swollen joints.

**Alzheimer's Disease:** Recent research done at the University of Newcastle suggests that ashwagandha [inhibits the formation of beta-amyloid plaques](#), the amino acid formations known to accumulate in the brains of Alzheimer's patients and interfere with cognitive processes. Though this research did not involve human or animal testing, it is thought to have promise for further study in search of an Alzheimer's treatment.

**Weight Management:** A study of 52 people diagnosed with chronic stress showed that two daily doses of 300 mg of ashwagandha resulted in a [significant drop in perceived stress and food cravings, as well as a decrease in serum cortisol and body weight](#).

**Improved Muscle Strength:** A series of studies involving healthy males showed that those taking from 300 mg to 1250 mg of ashwagandha daily demonstrated [measurable improvements in muscle strength and size](#). In comparison to participants taking a placebo, those on the ashwagandha regimen increased their bench press and leg extension capability as well as muscle size, serum testosterone, and muscle recovery.

**Male Sexual Dysfunction and Infertility:** A pilot study involving 46 male participants, all of whom had low sperm counts, showed remarkable results after a three-month regimen of 675mg of ashwagandha daily. At the end of the trial, the participants taking ashwagandha had a 167% increase in sperm count, a 53% increase in semen volume, and a 57% increase in sperm motility. Animal tests also showed that ashwagandha [increased prosexual behavior, increased testicular sperm production, and raised serum testosterone levels](#).

The participants in the pilot study referenced above were given a high-potency standardized extract of ashwagandha known as KSM 66, which has a high concentration (5%) of active ingredients known as withanolides. While similar

effects have been observed with extracts containing lower concentrations of withanolides, the higher concentrations are considered by many users to be particularly effective at promoting sexual health and vitality.

**Blood Pressure:** Studies indicate that ashwagandha can produce a [moderate but measurable reduction in blood pressure](#). In a 2010 study involving approximately 100 participants over a period of six months, an average 1.6% decrease in systolic pressure and 5.6% decrease in diastolic pressure was observed, along with a minor decrease in heart rate.

**Chemotherapy-induced Fatigue:** A 2013 trial involving over 100 breast cancer patients in all stages of the disease showed that ashwagandha effectively [reduced chemotherapy-induced fatigue and improved quality of life](#). While it is not a treatment for cancer, it is a very valuable adjunct therapy for cancer patients.

**Rejuvenation and Overall Health Improvement:** A comprehensive scientific review of existing studies, information, and research on ashwagandha confirms that the various constituents of the substance exhibit [a variety of therapeutic effects with no demonstrated toxicity](#). The review concluded that ashwagandha has anti-inflammatory, antitumor, antistress, antioxidant, immunomodulatory, and rejuvenating properties, capable of exerting a positive influence on the endocrine, cardiopulmonary, and central nervous systems.

## HOW IT WORKS

The exact mechanisms by which ashwagandha works are not entirely understood, but it is known that the active constituents are alkaloids and steroidal lactones that are collectively known as withanolides. It is this group of substances that is believed to have the potential for physiological activity.

One of the known mechanisms of the withanolide constituents of ashwagandha is the [modulation of circulating levels monoamine oxidase and GABA in the brain](#). GABA is an amino acid that acts as an inhibitory neurotransmitter, countering to some extent the effects of the stimulatory neurotransmitter glutamate and thus serving as a natural tranquilizer. Animal studies demonstrate that ashwagandha also exhibits GABA-like properties and enhances calmness without creating drowsiness. It has also been shown to have anti-depressant effects.



Ashwagandha is believed to promote the formation of dendrites, branching neuronal extensions that convey and propagate electrochemical stimulation from cell to cell. Increased dendrite formation is considered to be a marker of increased connectivity in the brain.

The active withanolides in ashwagandha are also believed to have substantial antioxidant properties, which makes them a valuable brain protectant. Antioxidants are chemical molecules that prevent potentially damaging oxidizing agents from affecting cells in the brain and body. Cells that have been affected by oxidation can turn into free radicals, molecules that scavenge and damage surrounding cells. The action of free radicals can trigger a chain reaction of cellular devastation that is strongly associated with aging and a variety of diseases, including Alzheimer's disease.

Ashwagandha also appears to be an effective anti-inflammatory agent. Inflammation is a natural response of the body's immune system, but when the immune system is impaired or spurred to overactivity, inflammation can become a serious health problem. Inflammation is implicated in a wide range of disorders, from arthritis and joint pain to obesity, heart disease, fatigue, blood vessel damage, and even cancer.

The anti-inflammatory properties of ashwagandha are believed to be at the heart of many of its benefits, including protecting and fortifying the immune system, improving memory, enhancing learning ability and reaction time, and preventing brain cell degeneration.

Ashwagandha appears to work particularly well in conjunction with Selective Serotonin Reuptake Inhibitors or SSRIs, commonly prescribed for compulsion-related mental disorders, as well as with GABAergic anxiolytics, including alcohol. It is not recommended for use in conjunction with JK inhibitors or MAO inhibitors.

## **DOSAGE**

Studies and clinical trials have tested a wide range of dosages, from as little as 50 mg once a day to as much as 1250 mg several times daily. The consensus is that the median effective dosage is from 300 mg to 500 mg, with optimal daily intake capped at 6000 mg, spread over three doses.

Users taking ashwagandha in conjunction with other anxiolytics, including nootropics like aniracetam, phenibut, and adrafinil, may find that a smaller dose is effective. As always, the best dosage advice is to start with the lowest possible effective dose and only increase as needed.

Ashwagandha should be taken with food. It's generally best to take it in two or three doses over the course of a day, but if a single dose is required, it should be taken with breakfast.

Ashwagandha may increase the effects of tranquilizers, sedatives, or other anxiolytics, including alcohol and some nootropics.

It may also potentiate drugs taken to reduce blood pressure or regulate blood sugar, so use with caution if you're taking other medications.

## STACKING

To fully experience ashwagandha's cognitive enhancing effects, it does best when stacked with other supplements.

Have a look at our [All-Natural Nootropic Stack](#) for some inspiration of a stack that contains ashwagandha.

## SIDE EFFECTS

Ashwagandha appears to be exceptionally safe and well-tolerated when taken in moderate doses (300 mg to 1500 mg daily). In fact, no serious side effects have been recorded in conjunction with taking moderate doses of ashwagandha over a short period of time. The most commonly reported side effects include indigestion and diarrhea, abdominal discomfort, and drowsiness. These side effects are generally mild and temporary; if they increase in severity or persist over a long period of time, the user is advised to discontinue use and seek medical advice.

Larger doses may cause side effects including nausea and vomiting, skin rashes, and increased acidity. Users who experience these effects are advised to reduce dosages or discontinue using ashwagandha.

Ashwagandha could potentially interact with other supplements and medications. It may increase the effects of sedative drugs and other anxiolytics, and it could interfere with the action of immunosuppressive medications.

Women who are pregnant or nursing should not take ashwagandha, and it is not recommended for infants or children because there is limited data on its safety in these populations.

## WHERE TO BUY

We recommend [Organic India Ashwagandha capsules](#) that can be found on Amazon.

Another option is to order directly from a reputable specialty supplement vendor such as [AbsorbYourHealth.com](#) where you'll be able to find ashwagandha as well as a wide selection of other nootropics.

## CLOSING THOUGHTS

There's no doubt that ashwagandha is both a potent adaptogen that helps the brain and body handle stress, and is a safe, well-tolerated anxiolytic proven to reduce anxiety.

Ashwagandha's anxiolytic and adaptogenic capabilities make it a valuable addition to nootropic stacks, particularly if stress or anxiety are part of the picture.

Not only does it improve mood, help regulate sleep, and enhance memory, it improves brain signaling by promoting neuronal health and growth. It also helps the body cope with stress by lowering levels of serum cortisol, a stress-related hormone that is associated with a spectrum of health issues, including impaired cognitive function.

Like most nootropics, ashwagandha is still being studied, and its full range of benefits and potential uses have yet to be discovered. But what is already known is exceptionally promising.

It's safe, effective, and very well tolerated, with no record of serious side effects or toxicity; it's widely available at affordable prices; it works well in combination with other nootropics, and it provides reliable relief from stress and anxiety.

It may be an excellent addition to your favorite nootropic stack.



# BACOPA MONNIERI

Bacopa monnieri is an herbal nootropic, a plant-based supplement that boosts brain power and reduces anxiety naturally. Discovered in ancient India, bacopa monnieri is an important medicinal herb that has been enhancing memory, mood, learning ability, and brain health for centuries.

## SUMMARY

Bacopa monnieri is one of the oldest and most well-respected nootropic supplements. A traditional [Ayurvedic medicine](#), sometimes referred to as Brahmi, has centuries of history as a potent cognitive enhancer, stress reliever, and brain protectant.

Bacopa monnieri is used to improve memory formation and speed of recall, make learning faster and easier, enhance clarity of thought, and augment overall brain function. It is also believed to act as a brain protectant, and [studies show that it has potential as a treatment for dementia](#).

Bacopa has also been shown to have significant anxiolytic or anti-anxiety effects, producing a feeling of calmness and tranquility and reducing feelings of stress. Users report that it is an excellent general relaxant and can improve the quality of sleep, so they wake feeling rested and refreshed.

Its nootropic effects are similar to those of Piracetam, one of the most familiar chemically synthesized “smart drugs,” but bacopa monnieri is an herbal supplement that is synthesized in nature rather than in the laboratory. The bacopa monnieri supplement is made from the extract of the bacopa monnieri plant, a low-growing perennial native to southern India and also found in warm wetlands throughout Asia and southern US states.

## BENEFITS AND EFFECTS

Bacopa monnieri is used throughout Asia as a traditional treatment for a wide variety of disorders ranging from asthma to ulcers, indigestion, and even epilepsy, but it is primarily known in the West for its potent nootropic properties.

## Memory Enhancement

Improving memory, in both memory formation and speed of recall, is one of bacopa monnieri's most powerful benefits. [Studies have shown that bacopa significantly improved memory](#) in groups of older people, and ongoing research is investigating its [potential for treatment of memory-impairing neurological disorders](#) including Alzheimer's disease.

## Improved Learning Ability

Bacopa Monnieri is known to augment cognitive processing, making learning new things faster and easier. Studies indicate that it [significantly improves spatial learning](#), and it has also been shown to [enhance learning capacity in subjects under stress](#). Most users say that taking bacopa when studying makes it easier to assimilate and recall new material, reports that are borne out by clinical trials at India's Central Drug Institute (CDRI) in Lucknow. The CDI studies indicate that children taking bacopa demonstrate enhanced academic abilities.

## Anxiety Reduction and Stress Relief

One of the most valuable benefits of bacopa monnieri is its ability to relieve anxiety and reduce the negative effects of stress. Clinical trials indicated that [bacopa significantly reduced anxiety and depression](#) in volunteers, and animal studies compare bacopa favorably to other plant extracts for the [effective treatment of anxiety and other psychiatric disorders](#).

## Anti-Aging Potential

One of the most exciting aspects of bacopa monnieri is its potential as a potent anti-aging supplement. Traditionally used in Ayurvedic medicine as a brain tonic, bacopa has been shown to have [powerful antioxidant properties that can protect the brain](#) against environmental stressors implicated in the cognitive impairment related to aging and closely associated with Alzheimer's disease and other neurological disorders.

# HOW IT WORKS

Bacopa monnieri impacts many body systems, but its nootropic and anxiolytic effects are largely created by its ability to promote neural communication and modulate the release of certain neurotransmitters.

## Memory and Cognitive Actions

Though it works over time by a variety of functions, bacopa generally improves memory and cognitive abilities by improving synaptic communication. It enhances the growth and proliferation of dendrites, the “branched” nerve cell extensions along which neural impulses travel, enhancing neural signaling. This improved neural impulse transmission is a key to cognitive enhancement.

Bacoside-A, the active ingredient in bacopa monnieri extract, has been shown to stimulate nerve cells and make synapses more receptive to nerve impulses. It also increases production of the enzyme Tryptophan Hydroxylase (TPH2), which is crucial to a number of central nervous system activities, including the biosynthesis of serotonin.

Bacopa is also thought to stimulate activity in the hippocampus by increasing the activity of kinases, proteins that regulate cellular pathways. Because the hippocampus is integrally involved in virtually all cognitive activity, this is believed to be one of the most important ways in which bacopa boosts brain power.

## Anti-Anxiety Actions and Mood Management

Bacopa monnieri produces its characteristic calming effects through several actions. One of its most important anti-anxiety effects lies in its ability to modulate the activity of specific neurotransmitter receptors, including those that regulate the uptake of serotonin, which is strongly associated with mood and anxiety management.

Also, one of bacopa’s active ingredients is hersaponin, an alkaloid that has been demonstrated to have a relaxing, sedative-like effect.

Studies also show that Bacoside-A, one of bacopa’s primary active ingredients, can prevent dopamine receptor dysfunction. Dopamine, a powerful neurotransmitter responsible for the brain’s reward and pleasure systems, is closely tied to mood.



Bacopa's active ingredients are also known to support the activity of GABA, a powerful inhibitory neurotransmitter that acts to prevent anxiety by restricting the firing of neurons that are over-excited by stress.

## DOSAGE

Bacopa monnieri is a powerful supplement that can make a huge positive difference in how users learn, think, and feel, but finding the right dosage is crucial. Unlike the racetam-class nootropics and other synthetic smart drugs that are extremely well tolerated at even very high dosages, bacopa does have the potential for toxicity when taken in large amounts.

It is also unlike many other nootropics in that it isn't generally considered to be fast acting and doesn't usually have observable effects immediately. Achieving maximum benefits from bacopa may require an extended regimen of regular doses over four to six weeks.

The active compounds in bacopa monnieri, bacosides, can vary from product to product but should always be stated on the supplement's label. A common recommended bacoside content level is 50%. A dosage of 300 mg per day, at 50% bacoside, is generally considered safe and effective but individual reactions to bacopa vary considerably. For other bacoside concentrations simply calculate that you are looking to get approximately 150 mg of bacoside content.

As with any supplement, it's wise to start with the lowest possible effective dose and build gradually as needed, closely monitoring reactions and effects and adjusting accordingly.

Many users report that taking bacopa monnieri late in the day or close to bedtime helps them sleep. However some users find that bacopa's cognitively stimulating properties are so powerful that the opposite is true, so it's best to take it early in the day until you're clear on how it affects your sleep.

Conversely, some find bacopa's calming effects so powerful that it creates unwanted daytime drowsiness. This can be addressed by reducing dosage, taking it closer to bedtime, or pairing it with a more stimulating supplement like oxiracetam to offset the sedative effect.

Bacopa monnieri is available in both capsule and powder form. It is fat soluble but can be dissolved in hot liquid; however, when taken by that means it has a strong taste that some find objectionable. Its actions can affect digestion, particularly when taken on an empty stomach, so it's best taken with food.

## **STACKING**

Bacopa monnieri works well on its own but is considered by many to be at its best in combination with other nootropics.

It is frequently combined with other herbal supplements for general health reasons, but for cognitive enhancement and mood management it works well to round out just about any nootropic stack.

For anti-anxiety and stress relief, it works well in a stack with other anxiolytic nootropics like aniracetam or phenibut.

For more mental and physical energy, bacopa pairs well with oxiracetam or phenylpiracetam.

For optimal cognitive performance, it works well in combination with piracetam, pramiracetam, or adrafinil.

Whether you're stacking for a calming effect or for additional energy and cognitive stimulation, the addition of a good choline source can be important to realizing the maximum benefit and preventing side effects such as a headache.

## **SIDE EFFECTS**

Though bacopa monnieri is generally safe and effective, there are some potential side effects ranging from minor to relatively serious. Most side effects are related at least in part to dosage levels, so always start with the lowest possible effective dose and build gradually as needed.

The most common side effects of bacopa are indigestion, dry mouth, increased bowel movements, and fatigue. These are all minor and often disappear as the body becomes accustomed to bacopa.

There are also studies on rats that suggest that [bacopa may temporarily reduce sperm count](#) after several weeks of supplementation. In those studies, sperm count levels returned to normal after supplementation was suspended. This side effect is far from certain due to the lack of sufficient medical research but to be safe, we suggest men consider the possibility before beginning long-term bacopa supplementation if they are planning to conceive in the near-term.

More serious potential side effects include thyroid disorders, urinary tract problems, gastrointestinal tract blockage, adverse effects on ulcers and lung conditions, and bradycardia or slow heartbeat. There is insufficient research to determine the safety of bacopa monnieri during pregnancy, so pregnant women are advised to avoid it.

## WHERE TO BUY

Bacopa monnieri is widely available via different vendors ranging from supplement stores to specialized online vendors. Keep in mind that not all Bacopa available on the market is of high quality.

There are many options available on Amazon.com of which we recommend [Absorb Health Bacopa Capsules](#).

Alternatively, bacopa monnieri can be purchased directly from [AbsorbYourHealth.com](#), our recommended supplier of nootropics.

## CLOSING THOUGHTS

Bacopa monnieri is an herbal supplement that has been used for many centuries to enhance cognitive abilities, reduce anxiety, and treat a variety of ailments.

Though it is quite different from many modern nootropics in that it must be taken over a period of days, weeks, or even months to achieve maximum results, many users consider it to be an invaluable addition to their supplement regime and testify to its powerful benefits.

If you're looking for an all-natural supplement that can boost your brain power, relieve stress and anxiety, and even protect your brain against aging, bacopa is an excellent choice.



# CDP CHOLINE

CDP Choline is a naturally-occurring chemical that many nootropic users consider an essential part of every stack. Safe, powerful, and extremely well-tolerated, it's a memory enhancer and brain-protectant on its own and a powerful potentiator in combination with other supplements, particularly the racetams.

## SUMMARY

CDP Choline, also known as citicoline or cytidine diphosphate choline, is a powerful nootropic supplement best known for its ability to enhance memory and protect the brain against memory loss. But an improved memory is only part of the CDP choline picture; it can also heighten focus, increase mental energy, and provide better clarity of thought.

Recent studies indicate that it may even be a useful treatment for a host of medical problems, ranging from head injuries, stroke, and neurodegenerative diseases to glaucoma, attention deficit disorder, and even [cocaine dependency](#).

For nootropic users, one of the most interesting aspects of supplementing with a choline source such as CDP Choline is its ability to amplify and enhance the effects of other nootropic supplements. It works synergistically with racetam class nootropics, significantly potentiating the effects of memory boosters such as piracetam and pramiracetam while preventing the minor but annoying headaches that are common side effects associated with racetam supplementation.

CDP choline, along with alpha GPC and centrophenoxine, is considered the most useful choline supplements for nootropics purposes.

## BENEFITS AND EFFECTS

CDP choline is a powerful nootropic supplement that potentiates other nootropics and works on its own to enhance many aspects of cognition and brain health:

- **Memory Enhancement:** CDP Choline is perhaps best known for its ability to improve memory and prevent memory loss. It is frequently associated with

anti-aging and has been studied as a [potential treatment for Alzheimer's disease](#).

- **Increased Mental Energy:** Maintaining peak mental energy is important for everyone, from students facing exams to older people suffering from the mental slow-down often associated with aging. Clinical trials have shown that [CDP Choline has a significant positive effect on mental energy, increasing frontal lobe bioenergetics](#) and mitigating the cognitive declines associated with aging.
- **Better Focus and Concentration:** CDP choline can increase the ability to concentrate for longer periods with less distraction, an essential for studying, mastering a new skill, or completing any complex and mentally demanding task. [Studies show that this is true even in the case of serious conditions including stroke, brain injury, and Alzheimer's disease](#).
- **Potentiating and Amplifying Other Nootropics:** Many nootropic users consider CDP choline a must-have when constructing any stack or combination of supplements. An outstanding choline source, it works particularly well with racetam class nootropics, making their effects stronger and at the same time preventing the minor headache that is sometimes associated with racetams. It has been shown to [delay the onset of cognitive deterioration in Alzheimer's disease when used in combination with piracetam](#).

## HOW IT WORKS

CDP choline is a psychostimulant nootropic that works in several ways: it [restores and repairs neuronal membranes](#), it [increases the levels of dopamine in the central nervous system](#), and it [enhances the production of the neurotransmitter acetylcholine](#). Its mechanisms of action have been extensively studied, and unlike those of many nootropics, CDP choline's actions and processes are well understood.

On absorption CDP choline splits into choline and cytidine and disperses throughout the body, crossing the blood-brain barrier and entering the central nervous system. The cytidine is converted into uridine, a nucleotide base that is crucial to neural membrane synthesis and is believed to enhance cognition. The released choline acts as a cholinergic, increasing levels of choline in the brain.

### Interaction with Racetam Class Nootropics

CDP choline's post-absorption action as a cholinergic makes it an ideal complement

to racetam nootropics, which draw heavily on choline for their brain-enhancing functions.

Choline is the precursor to the neurotransmitter acetylcholine, which is absolutely crucial to many aspects of cognitive function, particularly learning and memory. Racetam class nootropics like piracetam are considered acetylcholine agonists, compounds that increase the production and release of acetylcholine by stimulating the appropriate neurotransmitter receptor sites.

When sufficient choline is present, the increased production and release of acetylcholine creates significant cognitive enhancements, ranging from better memory to better focus, clearer thought, faster recall, and even enhanced sensory perceptions. But when choline supplies in the brain are insufficient the effect of racetam supplements is significantly diminished. Additionally, the minor but annoying headaches that are occasionally associated with racetam use are mainly attributable to insufficient choline.

For these reasons, many nootropic users consider CDP choline a must when assembling a stack that includes racetams. Each is a powerful brain enhancer on its own, but together they're far more potent than either one could be on their own.

## DOSAGE

Because CDP choline is so well tolerated, a wide range of doses has been documented without the appearance of significant side effects. A daily cumulative dose of anywhere from 250 to 1000 mg, either in a single dose or in two doses 8 to 12 hours apart, is generally considered safe and effective.

Interestingly, an MIT study shows that [the effects a dose of 4000 mg were not measurably different from those of a 2000 mg dose](#), which seems to indicate there is little value in taking very high doses.

CDP choline is available in both capsule and powder form. It is water soluble, and as much as 95% of an oral dose is absorbed by the body.

## STACKING

For nootropics users, one of the most important aspects of CDP choline is its value as a potentiator for other nootropics. This is especially true for racetams, which

really shine when paired with CDP choline. The ratios and actual dosages vary depending on which of the racetam class nootropics you use. Here are some example stack ideas to get you started.

## Piracetam and CDP Choline Stack

Good for overall cognitive enhancement, with neither stimulant nor calming properties.

### 1x-2x per day

- ▯ 250 mg [CDP Choline](#)
- ▯ 4800 mg [Piracetam](#)

## Pramiracetam and CDP Choline Stack

Similar to the piracetam stack, but the racetam component is considerably stronger (pramiracetam is 10 or more times as powerful as piracetam) so lower doses are needed to achieve optimal effect. When taken with CDP choline, pramiracetam's cognitive enhancements, which include improvement of memory, thought clarity, focus, and sensory perception, will be potentiated. This stack creates neither stimulant nor calming effects.

### 1x-2x per day

- ▯ 250 mg [CDP Choline](#)
- ▯ 250 mg [Pramiracetam](#)

## Oxiracetam and CDP Choline Stack

This powerful and popular racetam, sometimes referred to as the “speedy racetam,” combines the cognitive enhancements of piracetam with a major boost in energy, alertness, and wakefulness. This stack has a marked stimulant effect and could potentially interfere with sleep if taken late in the day.

### 1x-2x per day

- ▯ 250 mg [CDP Choline](#)
- ▯ 750 mg [Oxiracetam](#)



## Aniracetam and CDP Choline Stack

Aniracetam boosts cognitive abilities while creating a relaxing and sedative-like effect. This stack has a noticeable calming effect.

1x-2x per day

- ▯ 250 mg [CDP Choline](#)
- ▯ 1000 mg [Aniracetam](#)

## SIDE EFFECTS

Clinical trials and studies indicate that [CDP choline has no documented serious side effects](#), even at high doses. Toxicological tests have shown that it has no serious effects on the cholinergic system and it is perfectly tolerated, characteristics that make it suitable for the treatment of a variety of diseases, traumas, and disorders.

Indigestion, headache, insomnia, and diarrhea have infrequently been reported as possible side effects. No studies on the effect on pregnant women have been completed, so those who are pregnant or breastfeeding are advised to refrain from using CPD choline.

## WHERE TO BUY

We recommend buying CDP choline from [AbsorbYourHealth.com](#) as they are a trusted supplier of nootropics. All their products are tested for purity by 3rd party laboratories to ensure purity.

## CLOSING THOUGHTS

CDP choline is an excellent addition to any nootropic user's supplement regimen. On its own, it's a proven memory enhancer, known to improve recall and prevent against memory loss related to aging, illness, and injury.

It provides increased mental energy, better focus, and clearer thought. In combination with other nootropics it's a powerful potentiator, and when stacked with racetams in particular it creates synergistic effects that take cognitive enhancement to a level that neither supplement could reach without the other.

Clinically tested and studied for decades, CDP choline has been shown to be extremely well tolerated even at high doses, though high doses are not necessary to achieving optimal results. There are no documented serious side effects and it's approved for medical treatment in both Europe and Japan.

CDP choline is an affordable, readily available supplement that has a strong and growing following among nootropic users. If you want to get the most from your nootropic stacks, CDP choline is a choline source worth trying.



# CENTROPHENOXINE

Centrophenoxine is one of the best choline sources that can improve memory and mental performance, enhance and protect brain health, and slow the signs of brain aging. It is considered by many to be an invaluable addition to any nootropic stack.

## SUMMARY

Centrophenoxine, also known as meclofenoxate or Lucidril, is a well-known and respected nootropic that has been proven over five decades of use and rigorous clinical testing. It's a powerful nootropic and memory booster in its own right, and it's also an excellent choline source for use in combination with other nootropics.

Developed in 1959 by scientists at the French National Scientific Research Center, centrophenoxine was created as a treatment for Alzheimer's disease and other forms of [cerebral insufficiency](#) and [age-related cognitive decline](#). While it is still prescribed for the treatment of age-related memory loss in Europe, it is available over the counter as a dietary supplement in the US and is most frequently used for its nootropic or cognitive enhancement properties.

Centrophenoxine is classified as a cholinergic, a substance that delivers or enhances the action of choline. It's this cholinergic capability that makes it an efficient and effective nootropic on its own and a powerful potentiator when used in combination with other nootropics, particularly the racetams.

Choline is the precursor of the neurotransmitter acetylcholine, which is strongly associated with many aspects of cognitive function. Nootropics such as piracetam, pramiracetam, oxiracetam, aniracetam, and others which act by stimulating the production and release of acetylcholine draw heavily on the brain's choline supplies. Since they can only achieve optimal results when sufficient choline is available, users are advised to include a good choline source like centrophenoxine in every racetam stack.

Centrophenoxine has also been shown to act as an effective antioxidant and neuroprotectant, reversing the destructive effects of toxins and free radicals in the brain and effectively slowing cognitive decline.

It may also act as a mild stimulant and antidepressant.

## BENEFITS AND EFFECTS

Centrophenoxine offers a wide range of benefits for both brain and body:

- ▣ **Better Memory** – Centrophenoxine is best known for its considerable abilities as a memory booster. Its primary action is providing additional choline and enabling the production of acetylcholine, the neurotransmitter that is most closely tied to cognitive function in general and memory in particular.
- ▣ **Enhanced Fluid Intelligence** – Centrophenoxine can enhance fluid intelligence, or the ability to solve problems without relying on acquired knowledge.
- ▣ **Improved Overall Brain Function** – Centrophenoxine is considered a neuro energizer because it stimulates glucose uptake, oxygen consumption, and carbon dioxide production. The additional oxygen and glucose add to its nootropic effects, making learning easier, thought clearer, and all of the brain's functions more efficient.
- ▣ **Increased Energy** – Many users find that centrophenoxine has a mild stimulant effect. While it energizes without creating the jittery feelings that amphetamines or other stimulants cause, its energy boost is enough to disrupt regular sleep patterns if taken late in the day.
- ▣ **Anti-aging** – Research shows that centrophenoxine is an aggressive free radical scavenger and powerful antioxidant that protects the brain from age-related deterioration, flushes out toxins, and repairs damaged cells.
- ▣ **Mood and Motivation** – Users report that centrophenoxine has a strong motivating and mood-improving effect, acting as a mild but noticeable anti-depressant.

## HOW IT WORKS

Centrophenoxine is a combination of PCPA (parachlorophenoxyacetic) and a synthetic version of DMAE (dimethylaminoethanol) that has been modified to improve absorption and enhance its ability to cross the blood-brain barrier. It is a fat-soluble compound that is metabolized in the liver.

Though centrophenoxine has been the subject of decades of research, it's precise mechanisms of action are still not entirely clear. While it is known to cross the blood-brain barrier and ultimately increase the amount of acetylcholine in the synaptic vesicles, the exact method by which the process takes place remains a matter of speculation. Some researchers theorize that it works by converting into an intermediary phospholipid which is then used to make acetylcholine, while others believe it breaks down into choline in the brain and then is converted to acetylcholine.

But though the exact mechanism of action is not known, it is clear that centrophenoxine is a net cholinergic that increases production of acetylcholine, the neurotransmitter most strongly associated with memory and general cognitive acuity. This function is the primary means by which centrophenoxine acts as a nootropic, but it enhances cognition in other ways as well.

In addition to increasing acetylcholine production, centrophenoxine also stimulates brain activity. This brain state leads to [increased oxygen uptake and better glucose absorption](#) which result in many benefits, cognitive and otherwise. The increased oxygen and nutrient absorption energizes the brain and makes it function more efficiently, which improves focus, concentration, and clarity of thought.

Better oxygen and nutrient absorption is also an important factor in the improved fluid intelligence and problem-solving ability that many users report, and is believed to be largely responsible for the improved mood and enhanced energy associated with centrophenoxine.

Centrophenoxine has proven anti-aging as well as nootropic properties. It is an effective antioxidant capable of flushing out toxins that build up in cells as we age. It has been [shown to reduce or even eliminate the buildup of lipofuscin](#), a waste material present in aging cells, and it is believed to halt and perhaps even reverse the cellular potassium buildup that is associated with age-related cognitive decline.

## DOSAGE

A typical dose when taking as a nootropic, either on its own or in a stack, is 250 mg. A cumulative daily dosage ranging from 500-1000 mg is considered both safe and effective for most healthy adults interested in centrophenoxine's cognitive and nootropic benefits. Higher doses may be required to maximize its anti-aging effects,

but it is advisable to consult a medical professional before exceeding the recommended daily dosage.

As with all supplements, it is best to start with the lowest possible effective dose and build gradually as needed.

Because centrophenoxine is fat-soluble, it is best taken with food. Its mild stimulant effect could potentially interrupt sleep patterns if taken late in the day.

## STACKING

Centrophenoxine is an outstanding choline source that works extremely well with other nootropics, particularly the racetams. Review our [beginner's guide to stacking](#) for detailed information on basic combinations and ratios to help you design your own nootropic stack.

## SIDE EFFECTS

Centrophenoxine is safe and nontoxic at every level of dosage and is very well tolerated. However, some users have experienced mild and minor side effects, including nausea, headache, gastrointestinal issues, and sleeplessness. In most cases, the side effects were associated with high doses and reducing the cumulative daily dosage eliminated the unwanted side effects.

## WHERE TO BUY

Centrophenoxine can be purchased online via Amazon or specialized nootropics vendors.

Buying from Amazon is convenient and available in capsule form such as [Double Wood Centrophenoxine Capsules](#).

Alternatively, you can buy centrophenoxine from a specialized nootropic vendor such as [AbsorbYourHealth.com](#).

## **CLOSING THOUGHTS**

Centrophenoxine is a safe, effective nootropic supplement that can significantly boost memory, learning ability, fluid intelligence, and concentration. It is also a known anti-aging supplement capable of flushing toxins from cells and halting, or perhaps even reversing, age-related cellular damage.

For nootropic users, centrophenoxine is an outstanding source of choline that works exceptionally well with other supplements like the racetams, which put heavy demand on the brain's choline supplies.

Centrophenoxine is an affordable, readily available supplement with a long track record of success. Whether you're interested in a powerful memory booster, an anti-aging supplement, or a high-quality choline source to combine with other nootropics, this could be the one you're looking for.





# COLURACETAM

Coluracetam is a lesser known member of the racetam family of nootropics. Along with the traditional cognitive enhancement of racetams, early clinical trials suggest that coluracetam may also be helpful in the treatment of major depressive disorder with generalized anxiety disorder.

## SUMMARY

Coluracetam belongs to the wider group of racetam drugs. It is often touted for its memory boosting properties as well as its positive effects on manic depression and anxiety. Although coluracetam is mainly associated with these benefits, it has also been reported to boost optic properties although ongoing studies are needed to identify the exact mechanisms behind this benefit.

Coluracetam was originally synthesized in Japan by the Mitsubishi Tanabe Pharma Corporation as a potential treatment for Alzheimer's disease in 2005. When it failed to reach endpoints in its clinical trials it was licensed by BrainCells, Inc for further research.

## BENEFITS AND EFFECTS

After acquiring the license from Mitsubishi Tanabe Pharma Corporation, BrainCells Inc. immediately began testing the effects of coluracetam. As there weren't enough participants to take part in clinical trials for coluracetam, most of these tests were conducted on rats instead. From these tests, coluracetam was shown to markedly improve memory, learning, and anxiety.

### Memory and Learning

Coluracetam is shown to improve cognitive function and memory in rats, and in theory, the same results are expected in human beings. A study conducted by BrainCells Inc. [showed a memory improvement in rats](#) who were given substance AF64A (a neuron-specific neurotoxin) for eight days along with coluracetam in 3 mg doses. They were then put through the standardized Morris Water Maze to mark their ability to get through it, and even up to 72 hours after the last 8 mg dose, they were still able to. Another key finding of this study was that the results were still

apparent three days after the last dose, even though the serum concentration of coluracetam was negligible.

## Depression and Anxiety

BrainCells Inc. found that a dosage of 240 mg (split into three daily doses of 80 mg) was useful in treating major depression with co-morbid GAD (generalized anxiety disorder). However, the differences were most pronounced in those who didn't find relief in using standard antidepressants. After one dose, there were no noticeable differences, but after two doses of 80 mg, [36% had improved scores](#) during a depression assessment test.

## Eyesight

Coluracetam has been associated with optic benefits such as enhanced color vision, recognition, and vividness. Although there isn't any conclusive evidence to support the mechanisms behind this benefit, experts believe that coluracetam works in the part of the brain that runs visual processes.

## HOW IT WORKS

Like most racetam compounds, coluracetam increases choline uptake, but it also increases uptake in damaged neurons. Specifically, coluracetam interacts with the HACU process, which is responsible for absorbing choline into the neurons. This increased uptake occurs during the acetylcholine synthesis process.

Since coluracetam improves choline preservation during this process, a larger amount is converted into acetylcholine. This process results in increased memory, attention, and alertness. It is important to note here, that these benefits were only seen in subjects with previously impaired neurons, not in subjects with normally functioning neurons.

Coluracetam is also shown to improve AMPA potentiation, which is a process that triggers cognitive function and alertness.

Although coluracetam interacts with choline transporters as well, there isn't enough evidence to explain why or how this interaction occurs, or what occurs after the interaction.

## DOSAGE

Since the study subjects were rats, there aren't any recommended human dosages.

Anecdotally, nootropic users report dosing in the range of 3-35 mg up to 3x per day. It is generally advised to begin dosing at the lower side of the ranges to determine your reaction to the substance and work up as desired.

There isn't very much information to indicate toxicity of coluracetam, although doses given at the above increments showed no adverse side effects. If you haven't used a nootropic before, you may develop a headache after use, which is a common side effect in first-time users. By stacking coluracetam with a bioavailable choline source, you'll likely reduce this risk.

## STACKING

Like most Racetams, coluracetam stacks well with a choline source, such as Alpha GPC, for added memory and cognitive benefits. The recommended doses for supplemental choline is 300 mg to 600 mg daily if you're stacking with Alpha GPC and 250 mg to 750 mg daily if you're using CDP choline.

## WHERE TO BUY

Coluracetam is only available at certain online specialty vendors. We recommend [PeakNootropics.com](https://PeakNootropics.com) as your source for coluracetam or any other nootropics you would like to buy.

## CLOSING THOUGHTS

Coluracetam is a lesser known nootropic with less research compared to other more popular nootropics. The few studies that exist are promising, however, more research, particularly on coluracetam's effects on humans, is necessary.



# GINKGO BILOBA

Ginkgo biloba is a very old supplement that's gaining a new reputation as an effective natural nootropic. Used for thousands of years as a general health tonic, ginkgo biloba is now a popular memory enhancer, cognition improver, and brain protectant.

## SUMMARY

Ginkgo Biloba is one of the world's oldest natural medicines. Its use dates back tens of thousands of years to ancient China, where it was used to improve energy and treat a variety of ailments ranging from infection to asthma. Ginkgo biloba supplements are made from the leaves of the Ginkgo tree, which is one of the longest-living tree species in the world; some ginkgo trees are over 1000 years old.

Modern research has shown that ginkgo improves circulation and it is being studied as a potential treatment for a variety of ailments related to impaired blood flow, including headaches and sexual dysfunction. It is believed to have some value in combating the memory disorders related to Alzheimer's disease, and it is known to reduce leg pain and cramping caused by exercise. It has also been shown to benefit people who suffer from Raynaud's Syndrome, which is a painful response to cold, especially in the fingers and toes.

But some of ginkgo biloba's most exciting possibilities are related to memory, mood, and cognition. By increasing blood flow and improving circulation in the brain, this ancient supplement acts as a nootropic. Users say it improves memory, elevates mood, and enhances learning. It's also known to act as an antioxidant, protecting the brain from oxidative stress and damage from free radicals.

Because it interacts very well with other supplements and may act as a potentiator for other nootropics, ginkgo biloba is a popular addition to nootropic stacks. Ginkgo is not regulated as a pharmaceutical in the US and is available as a dietary supplement.

# BENEFITS AND EFFECTS

## Memory Improvement

Ginkgo biloba has a longstanding reputation as a memory enhancer, and recent research is proving that reputation to be well-earned. A number of studies and clinical trials have shown that ginkgo biloba supplements [markedly improved memory in people suffering from mild to moderate primary degenerative dementia](#). While similar studies on healthy participants have been less conclusive or with differing conclusions, many users report that taking ginkgo biloba makes their memory sharper, clearer, and faster.

## Enhanced Cognition

Ginkgo biloba's ability to improve circulation and blood flow in the brain makes it a useful and powerful nootropic, both on its own and in combination with other supplements. Better cerebral blood flow results in improved absorption of oxygen and nutrients, which in turn creates a feeling of mental clarity and alertness. It is also known to modulate the release of a number of important neurotransmitters, including acetylcholine, the neurotransmitter most closely associated with learning.

## Increased Energy

Ginkgo biloba has been considered a powerful energy booster for thousands of years, and modern research indicates that the ancient Chinese physicians who prescribed it as a general tonic were definitely on the right track. By improving circulation throughout the body, ginkgo biloba enhances oxygenation and the absorption of nutrients, increasing endurance and making muscles work better and perform longer.

## Mood Management

Ginkgo biloba has traditionally been used as a mood elevator, and clinical trials on participants suffering from anxiety disorders confirm that it is [an effective treatment for anxiety](#). It has also been shown to be [an effective mood modulator among healthy adults](#), and there is scientific evidence supporting its benefits for people suffering from depression.

## Better Vision

Clinical trials show that [ginkgo biloba improves vision in people who suffer from glaucoma](#), which is a family of diseases that result in vision loss via damage to the optic nerve. It has also been [proven to benefit people who suffer from macular degeneration](#), an incurable age-related condition in which the central part of the retina deteriorates.

## HOW IT WORKS

Studies show that ginkgo biloba has several mechanisms of action. Its primary active components include both ginkgo flavone glycosides, which act as free radical scavengers, and terpene lactones, which have antibacterial and other pharmaceutical functions. The actions of these components make ginkgo an anti-inflammatory and antioxidant that also enhances cerebral glucose utilization, reduces platelet aggregation, regulates neurotransmitter release, and impacts the vasomotor system.

One of ginkgo biloba's most important actions is inhibiting the platelet activating factor (PAF) receptor, which improves circulation throughout the brain and body by dilating blood vessels and making the blood less sticky. Ginkgo also protects the vascular system from damage by free radicals, which are incomplete atoms formed during the process of oxidation. Free radicals scavenge and damage other cells and can significantly impair circulation. Ginkgo biloba is a powerful antioxidant that neutralizes free radicals, preventing them from damaging surrounding cells and even repairing some of the damage free radicals may have already done.

Improved circulation plays a significant role in ginkgo biloba's therapeutic and nootropic capabilities. Better blood flow throughout the body makes muscles work better and reduces circulation-related pain and cramping. Enhanced cerebral circulation makes the brain work more efficiently, absorbing oxygen and nutrients faster and more thoroughly.

Ginkgo has also been found to modulate the release of several important neurotransmitters, increasing levels of serotonin, acetylcholine, and norepinephrine. In addition, ginkgo biloba has natural monoamine oxidase or MAO inhibiting properties similar to those in prescription antidepressants. MAO inhibition keeps the mood-related neurotransmitters dopamine, serotonin, and norepinephrine in balance and gives a feeling of mental clarity.



## DOSAGE

Ginkgo biloba doses of up to 600 mg per day (split into three doses) have been tested and found to be both safe and effective.

For a quick mental boost of mental performance, a single dose of up to 600 mg a couple of hours before the task should be a good starting point. If taken as a daily supplement for overall brain health and the prevention of cognitive decline, taking 40-120 mg doses one to three times per day is a common recommendation.

Ginkgo should be taken with food, and the daily total amount can be taken all at once or spread over two to three doses.

## STACKING

Ginkgo biloba is a popular natural nootropic that works very well alone but truly shines in combination with other supplements. Some users report its cognition-enhancing effects are best realized when it is combined, or “stacked,” with other supplements.

Here are some good, simple all-natural nootropic stack examples.

### Ginkgo Biloba and Vinpocetine Stack for Memory Enhancement

Vinpocetine is a natural nootropic that is best known as a memory booster. Like ginkgo biloba, it has been shown to improve circulation and act as a brain protectant.

#### 2x per day

- 600 mg [Ginkgo Biloba](#)
- 10 mg [Vinpocetine](#)

### Ginkgo Biloba, Ashwagandha and Gotu Kola for Mood, Cognition, and Energy

Ashwagandha is an ancient herbal nootropic that dates back to Ayurvedic medicine. Known primarily for its powerful anti-anxiety effects, it also boosts mood and cognition. Gotu Kola is a respected natural supplement known mainly for increasing

energy, but it also positively affects cardiovascular health and is known to improve conditions of chronic venous insufficiency.

### 2x per day

- 100 mg [Ginkgo Biloba](#)
- 300 mg [Ashwagandha](#)
- 600 mg [Gotu Kola \(5% Saponin\)](#)

## SIDE EFFECTS

Ginkgo biloba is considered both safe and well tolerated, but some minor side effects including nausea, headaches, and rapid heartbeat have been reported. These effects are rare and are usually temporary, but if you experience them a dosage reduction is recommended.

Women who are pregnant or nursing are advised to avoid ginkgo biloba, as there is little data on its effects in these situations. In addition, people who have just had surgery or are taking anticonvulsants, anticoagulants, or antidepressants are advised to avoid taking ginkgo biloba.

Ginkgo biloba supplements are derived from the leaves of the ginkgo tree, but eating the seeds of the ginkgo tree or consuming extracts made from the ginkgo seeds can trigger dangerous seizures.

## WHERE TO BUY

Ginkgo biloba is one of the most widely available supplements and is both available in regular storefronts and, conveniently, can also be ordered online. Based on our research, we recommend the following ginkgo biloba supplements that can be ordered from Amazon:

- [Neuro Clarity – All Natural Brain Function Booster \(Ginkgo Biloba complex with St John's Wort, and Bacopin\)](#)
- [Nature's Bounty Ginkgo Biloba Capsules](#)

Alternatively, we recommend purchasing ginkgo biloba from [AbsorbYourHealth.com](https://AbsorbYourHealth.com), a trusted vendor for specialty supplements.

## **CLOSING THOUGHTS**

Ginkgo biloba is an ancient natural supplement that has truly stood the test of time.

Widely prescribed as both a specific treatment and a general tonic for tens of thousands of years, it is currently being studied as a potential treatment for a variety of circulatory and memory-related disorders and is rapidly gaining in popularity as a natural nootropic.

Ginkgo biloba can boost energy, improve memory and cognition, and act as a powerful potentiator in combination with other supplements. It's safe, well-tolerated, affordable, and readily available everywhere.

If you're interested in making the most of your brain and body, ginkgo biloba is a supplement that's well worth a try.



# HUPERZINE A

Huperzine A is a natural nootropic that is touted for its ability to enhance memory and cognition by increasing the levels of neurotransmitters in the brain. Its effect on memory makes it a very popular supplement for students who want to improve their studying and recall abilities, often stacked with other nootropics.

## SUMMARY

Huperzine A, sometimes called selagine, is an alkaloid compound that is purified from the Chinese club moss *Huperzia serrata*. It was first identified in the 1980s, but extracts of the plant have been used in China for centuries as an herbal medicine. Huperzine A is commonly used to treat Alzheimer's disease and other neurodegenerative diseases for its ability to improve memory and cognitive abilities while acting as a neuroprotectant. Huperzine A is commonly taken as a natural supplement in healthy individuals for its nootropic effects.

## BENEFITS AND EFFECTS

Huperzine A can be used as a memory enhancer. It is particularly effective when taken while studying for a test or when trying to learn any new material. It can also be taken regularly to help protect against age-related declines in memory.

Most clinical studies of huperzine A have focused on its use as a treatment for Alzheimer's disease. A systematic review of 20 randomized controlled trials concluded that [huperzine A appears to have beneficial effects on improvement of cognitive function, daily living activity, and global clinical assessment in participants with Alzheimer's disease](#). None of the trials followed the patients for longer than 16 weeks to see if huperzine A could slow the progression of the disease, but other cholinesterase inhibitors have been found to slow the progression of neurodegenerative diseases.

Huperzine A has also been [formally studied as a memory enhancer for students](#). The students were given a memory test, and then they were given either huperzine A or a placebo. Four weeks later, they were retested. They also took exams in language and mathematics covering the lessons received at school during the four-

week time period. Huperzine A was found to significantly enhance memory. It did not, however, improve understanding of mathematics. It just improved the students' ability to retain and recall facts. The students taking huperzine A had significantly improved scores on their language tests compared to the students taking a placebo.

## HOW IT WORKS

Huperzine A increases levels of acetylcholine in the brain by blocking the action of cholinesterase. Huperzine A also has some activity as an NMDA receptor antagonist. It is neuroprotective, shown to protect neurons from damage due to glutamate, peroxides, and beta-amyloids. In mouse studies, it has been shown to promote [neurogenesis](#).

Four of the five drugs approved by the FDA for treating Alzheimer's disease are cholinesterase inhibitors. Acetylcholine has been shown to play a vital role in the formation of new memories. High acetylcholine levels enhance the magnitude of neurotransmissions to the cortex. It also suppresses the release of glutamate, which in turn suppresses feedback excitation of the cortex. The net effect is to make cortical circuits able to quickly respond to relevant sensory input, while simultaneously decreasing excitatory feedback that can impede memory retrieval.

The cholinesterase inhibitors currently on the market for treating Alzheimer's disease are fairly effective in improving memory in these patients. These drugs may also act to slow disease progression through their [neuroprotective](#) effects. However, the use of the four FDA-approved drugs is limited by their severe side effects on the digestive tract, lungs, and muscles. Acetylcholine is used in many parts of the body other than the brain, and increasing acetylcholine throughout the body causes many disturbances. Huperzine A doesn't have this limitation because it appears to have a very strong affinity for brain cholinesterases only.

## DOSAGE

For improving memory in young people, huperzine A can be taken at 100 mcg twice a day. It has been used at 50 to 200 mcg twice a day to treat Alzheimer's disease. We suggest that regular users take a break from the drug every few weeks to avoid physical habituation. For example, after taking huperzine A daily for three weeks, consider cycling off of it for one week before resuming regular use.

Huperzine A does not need to be taken with food. It is quickly absorbed into the body and will begin to enhance memory immediately. It has a very long half-life in the body, and a single dose will provide benefits for over 24 hours. The drug has been shown to be quite capable of passing the blood-brain barrier after oral ingestion and quickly accumulates in the cerebrospinal fluid.

## STACKING

While huperzine A will have an effect on its own, stacking it with the right components may yield even better results.

Taking huperzine A in combination with a choline source such as Alpha GPC can increase the amount of acetylcholine in the brain further, enhancing the effect of huperzine A.

Many individuals lack sufficient choline in their diets therefore supplementation can be effective.

A racetam is also a good choice for stacking with huperzine A. Racetams are thought to activate glutamate receptors that are located near acetylcholine receptors. This activity sensitizes the acetylcholine receptors so they are more likely to become activated. Sensitizing the receptors with a racetam and increasing the amount of acetylcholine with huperzine A enhances the nootropic effect of both drugs.

Huperzine A is also often paired with Noopept, a powerful and popular nootropic.

## Memory Boosting Huperzine A Stack

### Daily

- ▢ 10 mg [Noopept](#)
- ▢ 100 mg [Alpha GPC](#)

### As Needed / Cycled

- ▢ 50 mcg [Huperzine A](#)
- ▢ 5 mg [Vinpocetine](#)

## SIDE EFFECTS

Huperzine A appears to be quite safe even when taken daily however it tends to be used non-daily as necessary or cycled in order to avoid tolerance.

Longer-term safety has not been studied. Occasionally, huperzine A can cause digestive upset such as nausea, vomiting, and diarrhea. If taken in excessively large doses it can cause slurred speech, muscle twitching, drooling, incontinence, elevated blood pressure, and a slow heart rate.

Because huperzine A can slow the heart down and affect blood pressure, individuals with heart disease should use it cautiously. Its safety during pregnancy is unknown.

Individuals taking anticholinergic medications for Alzheimer's or glaucoma should discuss huperzine A with their doctor before taking it.

## WHERE TO BUY

Huperzine A supplements are relatively easy to find wherever supplements are sold locally or can be purchased online. We recommended [Source Naturals Huperzine A tablets](#) from Amazon.

Alternatively, you can order Huperzine A from a specialized nootropic vendor such as [AbsorbYourHealth.com](#).

There are also nootropic supplements that contain Huperzine A as one of their active ingredients such as [BrainStack](#) and [Alpha Brain](#).

## CLOSING THOUGHTS

Huperzine A is an excellent nootropic for a short-term boost in memory as well as promoting long-term memory abilities. It has a noticeable impact on the ability to memorize and recall facts. It will not, however, turn anyone into a genius overnight. It just makes studying more effective as well as improving the ability to recall what you've learned.



Huperzine A may even help protect the brain from age-related damage as it enhances memory.

Huperzine A is an effective natural nootropic to consider supplementing on its own or part of your stack.



# L-THEANINE

L-theanine is a naturally occurring amino acid found primarily in green tea leaves. It does an excellent job at relaxing without being a sedative making it an excellent choice to pair with stimulants.

## SUMMARY

L-theanine is an amino acid (a building block for proteins) that is naturally occurring in green tea leaves. It is renowned for its excellent [nootropic properties](#) such as improving memory, enhancing the ability to learn, and providing a calming effect.

L-theanine has a very similar chemical structure to glutamate, an amino acid in our bodies that assists in the transmission of nerve impulses in the brain, and as a result, it provides a whole host of benefits as a natural supplement for brain health.

## BENEFITS AND EFFECTS

Nootropics are supplements, drugs, or functional foods that enhance cognitive functions. L-theanine is often recommended as a supplement for people who are suffering from memory diseases such as Alzheimer's disease and dementia however it has been demonstrated that individuals with healthy brains benefit highly from its positive effects on the brain. It also has the remarkable ability to cross the blood-brain barrier which means that L-theanine is able to reach the brain directly.

L-theanine also has positive effects on stress levels and shown to increase dopamine and serotonin levels in the brain, which are some of the brain's feel-good chemicals. This is why tea containing L-theanine, such as green tea and oolong tea, are effective at helping people relax.

## DOSAGE

L-theanine is usually taken with caffeine for best results. A typical dose would be 200 mg L-theanine and 100 mg caffeine. If you're not a coffee drinker, it may be

better to start with a lower dose such as 100 mg L-theanine and 50 mg caffeine while maintaining the 2:1 ratio.

A little experimentation is recommended to find what works best for you.

Particularly anxious individuals may still want to leave out the caffeine completely.

## **STACKING**

L-Theanine has the ability to boost focus and enhance relaxation on its own but is most effective when combined in a stack with other nootropics.

### **L-Theanine and Caffeine Stack**

L-Theanine has demonstrated impressive positive effects on mental performance when “stacked,” or combined, with caffeine.

The combination of L-theanine and caffeine has synergistic effects that promote enhanced cognition and attention.

For that reason, stacking L-theanine with caffeine is one of the most popular choices among those looking for a cognitive boost due to its simplicity, low cost, and effectiveness.

The effects of stacking L-theanine with caffeine include:

- ▣ Improved memory
- ▣ Enhanced focus
- ▣ Increased motivation
- ▣ Boosted mood
- ▣ Reduced anxiety

Caffeine, a stimulant that most people are very familiar with, is primarily found in coffee but can also be found in tea, sodas, and chocolate.

This popular chemical is known for its energy boosting properties which is the reason why so many people love to start their day with a cup of coffee, helping them get them kick start their brain.

However, when caffeine is combined with L-theanine, the benefits of each are multiplied. Not only that, L-theanine nullifies caffeine's negative effects which include feeling jittery, anxious, and diminishing sleep quality.

### 1x-2x per day

- 200 mg [L-Theanine](#)
- 100 mg [Caffeine](#)

NOTE: For a convenient way to take this stack, we recommend getting [caffeine + L-theanine capsules from NootropicsDepot.com](#)

## SIDE EFFECTS

Supplementing with L-theanine is considered extremely safe and has been designated as a GRAS (Generally Recognized as Safe) ingredient by the Food and Drug Administration in the United States.

Some people report minor side effects, such as dizziness or headache, when taken with caffeine but are not widely reported.

## WHERE TO BUY

If you'd like to buy L-theanine, here are our recommendations:

- [Now Foods L-Theanine Capsules from Amazon.com](#)
- [L-Theanine Capsules from AbsorbYourHealth.com](#)

## CLOSING THOUGHTS

L-Theanine is a natural and safe amino acid that has many benefits making it a popular choice among those looking for a simple and effective way to boost their mental performance.

Taken alone, taken combined with caffeine, or included in a more advanced nootropic stack, L-theanine may be worth a try.



# LION'S MANE MUSHROOM

The Lion's Mane mushroom is one of nature's most powerful supplements for the brain. There is evidence that it has the ability to permanently enhance brain function as well as protect the brain and even promote neurogenesis.

## SUMMARY

Lion's Mane is an ancient Chinese medicinal mushroom that's developing a strong following in the world of modern smart drugs. Its ability to enhance overall cognitive function, proven neuroprotective qualities, and linked to the production of NGF, or [Nerve Growth Factor](#), is making Lion's Mane one of the most promising and popular natural [nootropics](#).

Used for centuries as a general tonic and health treatment, the Lion's Mane Mushroom (also known as *Hericium Erinaceus*, Yamabushitake or Satyr's Beard) is native to China, Japan, North America and Europe. Though it was traditionally prescribed as a general restorative, its effect on the brain has always been recognized, and ancient physicians used it to treat what we would now describe as neurodegenerative diseases.

In recent years the considerable nootropic capabilities of Lion's Mane have come to the fore, sparked in large part by the discovery of its connection to NGF, a protein that is crucial for the survival and function of nerve cells. Lion's Mane increases the amount of NGF in the brain, which enhances cognition by reducing inflammation, encouraging neural growth, and improving overall brain health.

But while cognitive enhancement is among the most significant benefits of Lion's Mane, it's far from the only one; studies suggest that Lion's Mane is a powerful neuroprotectant that could be useful in the treatment of a startling variety of conditions ranging from cardiovascular health to obesity and even some types of cancer.

Lion's Mane is a unique nootropic; just about everything about it, from effects to timeframe to methods of action are quite different from modern nootropics like

the racetams. But ongoing research continues to confirm its potency and potential as a brain and cognition enhancer, and many are finding Lion's Mane to be a valuable addition to their supplementation regimen.

## **BENEFITS AND EFFECTS**

### **Enhanced Memory and Brain Function**

Of course, the biggest draw for Lion's Mane supplementation is for its nootropic effects. Lion's Mane has been clinically demonstrated to enhance cognition including improved memory and recall. It also helps with maintaining focus and attention – something practically every person can benefit from. By increasing a person's ability to place focus on work or study, individuals will find themselves becoming more efficient in the school or workplace. Lion's Mane is a natural supplement that improves overall brain function.

There is a human study that was performed in Japan that consisted of 50- to 80-year-old individuals that were diagnosed with mild cognitive decline. They were administered Lion's Mane extract at a total daily dose of 3 g per day for 16 weeks. They found a [significant increase in scores on the cognitive function scale without any adverse effects](#).

### **Neuroprotection and Nerve Growth Factor**

Although most people are initially interested in Lion's Mane for its nootropic benefits, it also has an impressive ability to prevent and treat nerve damage.

There are over a dozen studies that support the claim that Lion's Mane supports neurogenesis, the creation of new neurons, resulting in permanent improvements to brain health.

A study conducted by the Tohoku University in 2008 explored the effects of mushrooms on nerve growth and came to a startling conclusion. Specifically, they found out that out of all the edible mushrooms available today, it is only Lion's Mane that has a positive impact on nerve repair. What happens is that some particles of Lion's Mane are digested and distributed through the body – allowing them to cross the blood-brain barrier. Once these particles manage to pass the line, they are capable of directly stimulating the production of enzymes that release the



Nerve Growth Factor and repairing nerve myelin. This ability to enhance nerve regeneration could be helpful in managing current conditions such as Alzheimer's, dementia, senility, muscular dystrophy, Parkinson's Disease, and other neurological problems.

## Depression and Anxiety

Human studies also suggest that [Lion's Mane can help improve depression and anxiety](#) symptoms after several weeks of supplementation.

## Other Health Benefits

The most traditional use of Lion's Mane in Chinese medicine is to treat stomach problems. Current research has shown that there is sufficient mineral content to back up this traditional application. It contains antibacterial properties and provides anti-inflammatory effects.

Other notable effects that can also be helpful for individuals include regulated blood sugar and cholesterol levels. These additional properties make it ideal for adults who are suffering from diabetes or have heart problems.

The mushroom also helps with detoxification, capable of removing the harmful materials usually floating inside the body. Hence, it doesn't just prevent problems but also boosts the immune system, preparing it for infections and bacteria.

## HOW IT WORKS

Lion's Mane's mechanisms of action are quite different from those of other nootropics. While the racetams and other synthetic smart drugs work by modulating the production of various neurotransmitters, Lion's Mane enhances cognition by increasing the amount of Nerve Growth Factor or NGF in the brain.

NGF is a neurotrophin, a small secreted protein that is essential for the growth, maintenance, proliferation, and survival of neurons. Though it is secreted in the brain and is crucial to optimal brain function, there is evidence that NGF is circulated through the entire body and is essential for maintaining a stable internal environment in response to changes in external conditions.

First identified in the 1950s by Rita Levi-Montalcini and Stanley Cohen, who later won a Nobel prize for its discovery, NGF has been extensively studied and shown to be one of the primary building blocks of brain health and neuroplasticity. The presence of sufficient NGF enhances cognition by encouraging the growth and branching of axons, the long threadlike nerve cell extensions along which impulses are conducted; insufficient NGF impairs cognition by leading to neuronal decay and the eventual death of nerve cells. The more axons that exist and the better their health, the more rapidly and efficiently impulses can be transmitted and the better the cognition and overall brain function.

Another way in which NGF enhances cognition is by promoting myelination, the development of the lipid/protein sheath that encases and protects axons. Myelin acts much like an electrical insulator, increasing the speed at which impulses travel along the axons by increasing the electrical resistance of the neural cell walls and preventing the impulse from dissipating or leaving the axon.

Myelination also lays the groundwork for the repair and regrowth of severed or damaged axons, providing a track along which regrowth can occur. This activity is an important process in protecting the brain from the ravages of aging, and may also be useful in the treatment of neurological diseases like multiple sclerosis as well as psychiatric disorders including dementia, depression, schizophrenia, autism, and Alzheimer's disease.

Ongoing research suggests that the NGF production stimulated by Lion's Mane may also have significant anti-anxiety and mood elevating benefits, and may facilitate weight loss by improving fat metabolism.

Unlike most modern nootropics, Lion's Mane does not produce immediately noticeable effects and must be taken over time to experience its many benefits.

## **DOSAGE**

The dosage recommendations of Lion's Mane depends on the potency of the extract. For a commonly available 10:1 extract (30% polysaccharide content), a typical dosage to experience its effects ranges from 500-3000 mg per day.

Dosing higher should not cause any adverse effects, but there is no evidence that quantities over 3 g per day will result in any further benefits.

When choosing a Lion's Mane supplement, make sure that it uses a combination of both hot water and alcohol extraction to ensure that all the desirable medicinal compounds are successfully extracted from the mushroom. This type of dual extraction ensures that you reap the whole spectrum of natural benefits from Lion's Mane such as stimulating the synthesis of Nerve Growth Factor (NGF) and promoting neuroprotection. Choose your source of Lion's Mane supplement accordingly.

## SIDE EFFECTS

There are very few reported side effects that arise from Lion's Mane supplementation.

Most users that experience side effects report a sensation of [itchy skin which may be explained by an increase in Nerve Growth Factor](#). Unless accompanied by other allergy-like symptoms, this is most likely the cause and may actually be an indication that the Lion's Mane is increasing your NGF levels.

Lion's Mane has been tested in mice and has shown no signs of toxicity even up to 5 g/kg and is therefore considered very safe. It is still recommended to supplement within the recommended dosages.

## STACKING

Lion's Mane is effective on its own and is also an excellent addition to other nootropic stacks.

### Lion's Mane Stack for Immediate Cognitive Boost

For an immediate cognitive boost, Lion's Mane can be stacked with fast-acting nootropics like piracetam, pramiracetam, aniracetam, or oxiracetam.

When racetams are part of a stack it's particularly important to include a high-quality choline supplement like Alpha GPC, CDP Choline, or centrophenoxyne to

ensure that there is ample choline available for transformation to acetylcholine, the neurotransmitter most closely associated with cognition.

#### 2x per day

- ▢ 750 mg [Aniracetam](#)
- ▢ 300 mg [Alpha GPC](#)
- ▢ 750 g [Lion's Mane Mushroom](#)
- ▢ 1 g [Fish Oil](#)

Note: Aniracetam can be substituted by another racetam (such as piracetam, pramiracetam, oxiracetam), at its respective recommended dosage.

### **Lion's Mane Stack for Long-term Cognitive Enhancement**

Lion's Mane's most desirable benefits lie in long-term supplementation (several weeks to months) resulting in lasting improvements to brain function.

Some of the supplements that best compliment Lion's Mane include Uridine and fish oil, both of which protect cellular membranes; zinc, which regulates synaptic function; and ALCAR or Acetyl-L-Carnitine, which reduces brain cell death.

Other good additions to a Lion's Mane stack would be Pregnenolone or P5, which encourages production of new neurons, and melatonin, which reduces neuronal death.

#### 1x per day

- ▢ 1500 mg [Lion's Mane Mushroom](#)
- ▢ 300 mg [Uridine](#)
- ▢ 2 g [Fish Oil](#)
- ▢ 15 mg [Zinc](#)
- ▢ 300 mg [Alpha GPC](#)
- ▢ 10 ml [Ashitaba](#)
- ▢ 5 mg [Pregnenolone](#)
- ▢ 1 g [ALCAR](#)
- ▢ 500 mg [L-Tyrosine](#)

## WHERE TO BUY

Lion's Mane supplements are relatively easy to find. Lion's Mane extract is available in both bulk powder and capsule form from various online vendors.

We recommend buying Lion's Mane extract online from [NootropicsDepot.com](https://nootropicsdepot.com), as they are a one-stop shop for cognitive enhancing supplements. Their Lion's Mane is derived from organic whole fruiting body extracts, with not only testing to verify the percentage of active beta glucans, but also that starch content is low, and that there are no pesticide residues.

If you prefer doing your shopping on Amazon.com, we recommend sticking to either [Host Defense Lion's Mane Capsules](#) or [BrainForza's Lion's Mane Capsules](#) as a source of high-quality Lion's Mane.

## CLOSING THOUGHTS

Lion's Mane is a unique and exceptionally promising natural nootropic that has been proven to improve brain health, enhance cognition, and protect the brain against injury, disease, and the effects of aging.

Though it doesn't have the immediate effects of modern synthetic nootropics it may be a highly effective supplement and deserves a close look from anyone that wants real, long-lasting, improvements to memory and brain function.



# MODAFINIL

Modafinil is a wakefulness-promoting agent that is often used off-label by healthy individuals that want to enhance their mental performance. Its effectiveness has been well-documented in several studies over decades of research.

## SUMMARY

Modafinil is a powerful stimulant and wakefulness-promoting drug that was developed for the treatment of narcolepsy and other daytime sleep disorders. But its ability to prevent sleepiness and fatigue is only part of the picture; extensive testing has shown that Modafinil offers an impressive list of cognitive benefits ranging from enhanced mood and mental alertness to increased motivation, improved reaction time, reduced fatigue, and better memory.

Modafinil is listed as a Schedule IV controlled substance in the US and is sold as a prescription drug in the US and Canada, where it is typically prescribed under the names Provigil and Alertec. However, its proven cognitive benefits also make it a potent and increasingly popular nootropic or “smart drug,” used off-label by students, business people, shift workers, and others who are interested in increasing wakefulness and enhancing mental performance.

Though the effects of Modafinil are similar to those of amphetamines like Adderall, it's a very different substance. Modafinil is a eugeroic that specifically improves alertness, while Adderall and other amphetamines are psychostimulants that produce a temporary increase in overall psychomotor activity. Because Modafinil's actions are more targeted and selective, is thought to provide a “smoother,” less jittery energy, have fewer serious side effects, and be better tolerated and have a lower potential for abuse or addiction than Adderall.

## BENEFITS AND EFFECTS

First and foremost, Modafinil excels at what it was originally designed to do: it increases wakefulness and alertness, and enhances mental function in a sleep-deprived state.

A derivative of the ground-breaking non-amphetamine stimulant Adrafinil, Modafinil is both faster-acting and more bioavailable than Adrafinil and has been marketed as a separate drug since the late 1970s. After extensive testing, Modafinil was approved by the US Food And Drug Administration for use as a narcolepsy treatment in the late 1990s.

As a eugeroic or wakefulness-promoting agent, Modafinil has been shown to effectively prevent excess daytime sleepiness without disrupting normal nighttime sleep. This makes it an extremely valuable treatment for people with narcolepsy or related sleep disorders such as obstructive sleep apnea. It is also useful for people whose jobs require them to be alert and active at night when their circadian clocks are telling them to sleep. The US military has successfully used Modafinil to help helicopter pilots stay alert throughout sustained operations.

It's important to understand that while Modafinil enhances wakefulness, it's not a long-term substitute for sleep. Though Modafinil can be used to stay awake through regular sleep periods for a short period of time without incurring an immediate burdensome sleep debt, adequate sleep is absolutely essential for good health and cognitive function. Many off-label users who take Modafinil as a nootropic report that they get the best cognitive boost and most significant nootropic effects from Modafinil when they are not sleep-deprived.

## Cognitive Effects

Promoting wakefulness is only one of Modafinil's effects. It's particularly good at [enhancing cognition](#), both in healthy, non-fatigued people and in people experiencing sleep deprivation. It is also proven to improve mental function for people with conditions that impair attention processing, such as cognitive decline, ADHD, or drug dependence.

Clinical trials have repeatedly shown that Modafinil enhances mood, boosts executive function, [improves reaction time](#) and [increases memory](#) in both sleep-deprived and healthy, non-fatigued subjects.

## Neuroprotectant

Interesting new research suggests that Modafinil can actually promote brain health. It has [antioxidant properties](#) that can reduce the presence of damaging free radicals in the brain tissue, making it an effective neuroprotectant.



## Impulse Control

Modafinil has been shown to be an effective means of impulse control in a variety of situations, including [alcoholism](#) and [gambling addiction](#).

## Treatment of Other Conditions

Research indicates that [Modafinil is comparable to amphetamine in the treatment of ADHD](#). Though it is now sometimes used as an alternative to conventional stimulants for the treatment of adult ADHD, it is currently not approved as a treatment for childhood ADHD. Studies also suggest that Modafinil is an effective treatment for both the [fatigue and memory impairment related to multiple sclerosis](#). Ongoing clinical trials are testing Modafinil as a treatment for a broad range of conditions, including depression, schizophrenia, seasonal affective disorder, and nicotine addiction.

## HOW IT WORKS

Modafinil's effects are similar in some ways to those of conventional stimulants, but its unique mechanisms of action set it apart. Unlike amphetamine, methylphenidate, and other central nervous stimulants that induce wakefulness by general widespread neuronal activation, Modafinil activates neurons selectively, focusing primarily on the hypothalamus and amygdala.

While it is known that Modafinil modulates the brain's histamine, norepinephrine, serotonin, dopamine, and orexin systems, the precise mechanisms of its action have not been identified in terms of locating a single site of action or major receptor binding.

However, it is clear that Modafinil's effect on various important neurotransmitters is at the heart of its potency, both as a eugeroic and as a nootropic.

- **Orexin/Hypocretin:** Much of Modafinil's wakefulness promoting action is attributable to its action on the brain's orexin/hypocretin system, which is located in the hypothalamus and is responsible for regulating wakefulness, arousal, and appetite. The most common form of narcolepsy is caused by a lack of orexin, which Modafinil is believed to address by acting directly on orexin neurons. Stimulating these neurons also increases production of

histamines and other important neurotransmitters that are related to wakefulness and alertness.

- **Histamine:** Though we usually hear about histamine in relation to allergies and local immune responses, it also plays an important role in the regulation of the sleep/wake cycle. Modafinil's action in the hypothalamus is believed to elevate histamine levels, contributing significantly to wakefulness and alertness.
- **Dopamine:** An important neurotransmitter associated with the stimuli/reward response, dopamine can improve mood and increase motivation and focus. Unlike amphetamines and other stimulants which directly stimulate dopamine release and increase dopamine levels in a very rapid and highly amplified manner, Modafinil works more gradually by blocking the receptors that remove dopamine from the synapses, which effectively elevates the amount of dopamine available for immediate use in the brain. This gradual and somewhat indirect action on the dopamine system is an important feature of how Modafinil works because it reduces the "rush" type of euphoria that is associated with addiction.
- **Norepinephrine:** Modafinil is believed to increase the availability of norepinephrine, a stimulant neurotransmitter that promotes wakefulness and increases alertness. The exact means by which Modafinil increases the availability of this stimulant neurotransmitter is unclear, though it may be related to Modafinil's action on the orexin system and dopamine receptors.
- **Glutamate:** Modafinil elevates levels of glutamate, the brain's principal excitatory neurotransmitter, by stimulating the extracellular release of glutamate in the hypothalamus. Glutamate plays a crucial role in cognitive function, and this increased availability plays an important role in Modafinil's nootropic effects, from increased memory to improved focus and even brain plasticity.

Though not everything about Modafinil's mechanisms of action is completely understood, more than 40 years of extensive research have provided invaluable insights on its effects.

- **Effects in Comparison to Amphetamines:** A 1997 study determined that [Modafinil is more effective than methamphetamine at inhibiting the sleep drive](#), despite the fact that Modafinil increased motor activity only slightly while methamphetamine produced profound increases in motor activity. The same study also demonstrated that Modafinil produced more consolidated periods of wakefulness than methamphetamine. Interestingly, Modafinil has

been shown to restore [normal levels of learning ability in methamphetamine addicts](#). While modafinil addiction is recognized as a possibility, it is widely believed to have significantly [lower addiction risk than amphetamines](#) and has even been proposed as a treatment for methamphetamine and cocaine addictions.

- **Effects on Exercise and Sports Performance:** Modafinil has been shown to improve sports and exercise performance, largely by [significantly extending the time before feelings of exhaustion are experienced and reducing the perception of fatigue](#). It was added to the World Anti-Doping Agency's list of prohibited substances in 2004.
- **Effects on Cognitive Abilities:** Decades of research support the idea that Modafinil results in measurable improvement in a wide array of cognitive abilities, ranging from [working memory and fluid intelligence to both spatial and episodic memory, pattern recognition, executive function, and performance on tasks that require higher-level thinking](#). Some studies suggest that Modafinil's [effects may be most marked among low-performing subjects](#). Clinical trials confirmed that [Modafinil improves mood in healthy subjects but may result in anxiety](#).

## DOSAGE

In the treatment of narcolepsy or other sleep disorders, Modafinil is most commonly prescribed in daily dosages of 100 mg or 200 mg, to be taken immediately upon waking or at least early enough in the day to permit regular sleep at night.

For Shift Work Disorder, the recommended dosage is typically 200 mg, taken one hour before the commencement of the shift. The average dosage prescribed for the treatment of adult ADHD ranges from 100-200 mg daily, and dosage for the treatment of other conditions, including mood disorder, addiction, and fatigue and cognitive impairment caused by multiple sclerosis, varies depending on each patient.

When taken as a nootropic, a starting dosage of no more than 50 mg is generally advisable, increasing the amount gradually over a period of time and only as needed to achieve results.

The maximum safe daily dosage is generally recognized as 400 mg, and indeed clinical trials suggest that a 400 mg dose doesn't provide markedly improved results

over a 200 mg dose, though the larger dosage may increase the possibility of adverse effects.

Modafinil appears to be safe for prolonged periods at moderate (100-200 mg) daily dosages, and large-scale clinical trials showed [no significant indications of the development of tolerance over periods ranging up to several months](#).

Even when taken at moderate therapeutic doses, psychological dependence is a rare but distinct possibility and has been recorded in isolated case studies, which reported withdrawal symptoms including anxiety, insomnia, lethargy, and the inability to feel pleasure.

## STACKING

### Modafinil + Phenylpiracetam Stack

This stack has been reported to increase energy and focus, as expected from Modafinil, while the addition of [phenylpiracetam](#) and [ALCAR](#) help increase fluidity of thought, curiosity, and self-perceived creativity. Credit to [TramMcD](#) for this stack idea.

#### 1x per day

- ▣ 50 mg Modafinil
- ▣ 100 mg [Phenylpiracetam](#)
- ▣ 500 mg [ALCAR](#)

## SIDE EFFECTS

Though Modafinil is generally considered to be both safe and well-tolerated at moderate dosages, it's a powerful substance and does have some possible negative side effects, which can range from minor annoyances to major health threats.

The most commonly reported side effects of Modafinil are considered minor and non-severe, including anxiety, insomnia, headache, nausea and indigestion, dizziness, diarrhea, dry mouth, and inflammation of the inside of the nose. Many of these side effects may be brief and temporary, though if they persist or worsen over time the user is advised to seek medical advice.

Some less commonly reported side effects that should be noted but are not usually considered serious problems include excessive thirst, involuntary trembling, quaking, or shivering, loss of appetite, vomiting, and backache. As with the most common side effects, these may be brief and temporary but should be reported to a physician if they persist or worsen.

There are a number side effects of Modafinil that are regularly though not frequently reported, and are considered very serious. Anyone who experiences them is advised to seek medical attention immediately. These include rapid or pounding heartbeat, abnormal heart rhythm, or chest pain; high or low blood pressure; the inability to empty bladder or bowels; chills and/or fever; confusion, depression, loss of memory, or mood changes; dyskinesia, or the impairment of voluntary movement; and problems with eyesight.

There are some side effects of Modafinil that are rarely reported but are considered extremely serious. Anyone who experience any of the following while taking Modafinil is advised to seek medical advice without delay: asthma, giant hives, suicidal thoughts, abnormal peeling of skin, bloody urine, rash or skin blisters, red or swollen mouth tissue, trouble breathing, visible water retention, or hyperactive behavior.

A medical exam may reveal even more serious side effects, including abnormal liver function, decreased blood platelets or red blood cells, inflammation of heart tissue, or hepatitis, among others.

## **WHERE TO BUY**

In Canada and the US, Modafinil is only available by prescription. Some people opt to order Modafinil from international pharmacies where they are sold without a prescription. However, ordering from these discreet pharmacies may not only be illegal in your country, but there are additional risks such as receiving drugs that contain the wrong active ingredient, too much or too little of the active ingredient, or contain dangerous ingredients.

However, Adrafinil, which is actually a precursor to Modafinil, is a legal alternative that has very similar effects. Like Modafinil, Adrafinil increases wakefulness and alertness, reduces fatigue, and offers substantial cognitive benefits, including better mood, memory, and motivation.

[Click here to learn more about Adrafinil.](#)

Adrafinil can be purchased online from specialized vendors such as [AbsorbYourHealth.com](#), a popular source for cognitive enhancing supplements.

## CLOSING THOUGHTS

Modafinil is definitely one of today's most exciting, widely discussed, and intriguing nootropics, and with good reason: it packs the eugeroic and cognitive "punch" of amphetamines, making it possible to perform both physically and mentally at peak levels for long periods, but without amphetamines' typical jitteriness, irritability, paranoia, and eventual devastating sleep-debt crash. It's generally safe and well-tolerated, and it appears to have a low potential for addiction.

But even a quick read through any of the top nootropic community forums will show that users' results with Modafinil are varied. While some are hailing it as a modern miracle that can change your life, make you smarter, and rewrite the book when it comes to the need for sleep, others caution that the Modafinil experience isn't equally rosy for everyone. Some users report disappointing or even unpleasant outcomes, and others caution that taking it off-label could actually be a very risky business. Which view is correct?

As usual, both sides of the story are important. There's absolutely no denying the decades of research that have irrefutably proven that Modafinil has tremendous cognitive benefits and low addiction potential, but at the same time there's no way around the fact that it is indeed a very powerful drug that can have some serious side effects, and to which everyone responds differently.

The bottom line? Everyone responds differently to nootropics and indeed to all drugs, but decades of research have shown that Modafinil is safe, effective, and well-tolerated. If you're interested in maximizing your cognitive abilities and minimizing fatigue and sleepiness for limited periods, Modafinil is a nootropic worth considering.



# NOOPEPT

Noopept is one of the strongest nootropics available on the market today. It provides a boost to overall cognition and has a slight psychostimulatory effect. Contrary to most nootropics, Noopept's effects start within mere minutes of ingestion making it an excellent choice right before mentally demanding tasks.

## SUMMARY

Noopept is a nootropic supplement that's been getting a lot of attention lately. It has close ties to the popular racetam family of nootropics that are known for their benefits on cognitive ability as well their neuroprotective properties. What makes Noopept a unique nootropic in your toolbox is that its effects are felt almost immediately after ingestion.

Many nootropics can take days, weeks, or even months, for their full effects to kick in but Noopept is another story. Another nootropic that compares to Noopept's immediate effects is [phenylpiracetam](#).

Currently, Noopept is being prescribed and distributed in Russia and its surrounding countries for its nootropic properties. Its popularity has drastically increased and is now distributed worldwide.

Noopept as a nootropic is commonly compared to [piracetam](#) and [aniracetam](#). It works via a similar mechanism as piracetam but is estimated to be 1,000 to 5,000 times more potent. This doesn't imply that its effect is more profound, it just attunes itself better to the brain's receptors. As a result, Noopept can be taken in relatively smaller doses to produce similar effects as that of Piracetam.

Noopept is also very inexpensive when compared to other nootropics because of how potent it is per milligram. Its effectiveness coupled with its affordable cost per dose have made it a favorite among the nootropic community.



# **BENEFITS AND EFFECTS**

To have a better understanding of what Noopept can do, let's enumerate its key benefits:

## **Memory and Learning**

Noopept's most emphasized benefit is how it can enhance memory and improve the learning process. Noopept, like Piracetam, assists with memory formation, but with additional benefits not present in the latter, which are memory consolidation and memory retrieval. Noopept facilitates the proper management of all forms of stimuli as they are processed by the brain, which allows for better memory retrieval. In other words, signals being processed by our senses are more streamlined as they are transported into our brains in the form of memory.

Through the continued use of Noopept, you will notice that you can digest more information and process it more readily for use in your daily activities. You might even recall names, places, maybe a word spoken in a chance encounter, a song title that you thought you had forgotten before, and so on. Memory lapses will be a thing of the past, or at least kept to a minimum.

## **Neuroprotective Properties**

Studies show that Noopept has high neuroprotective properties. The stimulation of the neurons caused by the health supplement prevents oxidative damage and apoptosis in the human brain. Many patients dealing with cognitive impairment regularly can benefit from a regular dosage of Noopept to prevent further dissociative cognitive functions.

## **Increased levels of NGF**

[NGF \(Nerve Growth Factor\)](#) is a unique protein in the body that is involved in the growth, maintenance, and survival of nerve cells, including brain cells. NGF is also considered to be a key player in neurogenesis, your body's ability to create new cells.

By increasing NGF levels in the brain, we support the mechanisms involved in neurogenesis which improves the performance of neural networks within the brain, allowing for new neural connections. The result means potentially improved mental abilities in virtually all areas of cognition.

## Increased levels of BDNF

BDNF (Brain-Derived Neurotrophic Factor) is another protein in the body that has a similar role to the NGF mentioned above. BDNF is considered one of the most important molecules involved in memory, [playing a vital role in both short-term and long-term memory formation](#).

## Improves Associations between Brain Hemispheres

Both the right and left hemispheres of the brain have their own localized functions. Through the use of Noopept, each of these functions can be enhanced through the synthesis of various memories, ideas, and stimuli. There are nuances among these functions that enhance the way we think. That is why a lot of people have claimed that their quality of life had a significant improvement when taking Noopept in regular doses.

## HOW IT WORKS

Users of Noopept report results of improved clarity, better memory, and focus. More studies are required to determine exactly how Noopept delivers its benefits to the human brain. Studies on animals have shown that [Noopept increased alpha/beta1 activity in all brain areas](#).

In humans, based on observational, uncontrolled studies, Noopept demonstrated rehabilitative benefits to patients with mild cognitive disorders. Currently, Noopept tablets are undergoing clinical assessment as a way of treating cognitive deficiency of post-traumatic origin and cerebrovascular cause. The brain benefits are derived from antioxidant action, anti-inflammatory properties, and the inhibition of toxicity with the elimination of excess glutamate and calcium. It was also observed that blood composition and flow were improved.

Taken orally, Noopept is absorbed by the digestive system and then readily crosses the blood-brain barrier. When administered in the proper dosages, it is nearly completely used by the brain and very little is wasted. Noopept targets glutamate receptor sites where it is believed to bind with the glutamate and inhibit breakdown. Glutamate, being one of the most powerful neurotransmitters, supports and expands cognitive functioning.

Noopept acts quickly once it is in the bloodstream, maximizing concentration after just 15 to 20 minutes. Advocates of the supplement report the flooding of clarity brought on by the immediate advantage of additional oxygen to the brain and improved glucose use. Many individuals report improved vision and sharper, more vibrant colors. Others have even reported enhanced hearing following just a short period of usage.

## **DOSAGE**

Due to its incredible potency, the recommended dosage of Noopept is small, usually 10 to 20 mg taken as often as three times daily. Dosage should not exceed 40 mg in a 24-hour period.

Since the body metabolizes Noopept rapidly, and it has a very short half-life in the human body, it is preferable to take multiple small doses versus one large dose, extend Noopept's acute effects.

When starting out with Noopept, we recommend a starting with the minimum effective dose, with careful observation, before increasing dosage. Each person should determine their own optimum dosage.

In powder form, Noopept is usually placed under the tongue or mixed with water and drunk. Effects are felt quickly after administration, as fast as within 15 minutes.

According to the dosing label that comes in the packet insert in Russia, it is recommended to take Noopept for 1.5-3 weeks and then, if necessary, to begin another cycle after a 1-month break. Alternatively, many nootropic users follow a cycle of 56 days on and 4 days off.

Do not take Noopept late in the evening as its energizing effects may interfere with sleep.

## **STACKING**

Noopept can be taken alone but also does very well in nootropic stacks for synergistic benefits.

## Noopept, Piracetam, and Choline Stack

Because Noopept delivers results similar to piracetam, stacking the two may result in synergistic benefits. The two supplements work on two different neurotransmitters, glutamate and acetylcholine, respectively. Gaining enhanced functionality of both transmitters could create a tremendous boost to a variety of cognitive processes. Furthermore, adding a choline supplement to the stack could make the piracetam more effective and help to hold off headaches reported by some initial-stage Noopept users.

### 1x-2x per day

- ▣ 10 mg [Noopept](#)
- ▣ 2 g [Piracetam](#)
- ▣ 300 mg [Alpha GPC](#)

## Noopept, Aniracetam, Sulbutiamine Stack

Stacking Noopept with aniracetam and sulbutiamine would be a powerful stack that would not only boost cognition but also provide improvements to mood as well as reduce anxiety. These effects on mood and anxiety should also indirectly lead to improved creativity and mental performance due to the relaxed mind state. Keep in mind sulbutiamine should be cycled to avoid building up a tolerance to it.

### 1x-2x per day

- ▣ 10 mg [Noopept](#)
- ▣ 1 g [Aniracetam](#)
- ▣ 300 mg [Sulbutiamine](#)
- ▣ 300 mg [Alpha GPC](#)

## SIDE EFFECTS

For all the positive things that Noopept can do for your cognitive health the supplement has only a few occasionally reported minor side effects that should be noted such as headaches, restlessness, dizziness, and irritability.

These are most common when Noopept is taken in high doses.

Further evidence also suggests that Noopept can enhance the effects of stimulants such as amphetamines so caution is advised.

## **WHERE TO BUY**

Noopept is generally not available for purchase at typical brick-and-mortar stores. If you'd like to buy Noopept, you'll need to order it online.

We recommend ordering Noopept from [AbsorbYourHealth.com](https://AbsorbYourHealth.com) as they are a reliable and reputable source for bulk nootropic powders.

## **CLOSING THOUGHTS**

The benefits of Noopept are numerous, to say the least, but the best thing about it is that its effects are cumulative.

Noopept has quickly risen in popularity and has made its way into many people's nootropic stacks due to its impressive effects, ease of its small doses, and its economical price.

Whether you are an experienced nootropic user or just getting introduced, Noopept is a worthwhile contender.



# OXIRACETAM

Potent, safe, and highly effective, oxiracetam is one of the best and most popular nootropic supplements available. Not only is it a true brain booster that enhances the full spectrum of cognitive processes, it is also a mild stimulant that improves and restores both physical and mental energy.

## SUMMARY

Oxiracetam is a true cognitive enhancer that affects a wide range of cognitive processes, improving everything from attention span to memory, learning capacity, concentration/focus, sensory perception, and even technical/logical thinking. It also acts as a stimulant, increasing mental energy, alertness, and motivation. [Studies show that it is safe and effective in long-term therapy](#), and there is even [clinical evidence that it may even promote and preserve brain health](#).

Developed in the 1970s, oxiracetam is a synthetic derivative of piracetam, the original nootropic “smart drug.” Though its mechanism of action is similar to that of other racetam class supplements, oxiracetam is about 5 times more potent than piracetam. Its stimulant properties, which are similar to those of phenylpiracetam, are frequently described by users as both mild and smooth, without the feeling of agitation common to other stimulants.

Though it is best known for its ability to improve memory, learning ability, and other cognitive functions while enhancing alertness and energy in healthy individuals, oxiracetam has been extensively studied as a potential treatment for memory loss related to Alzheimer’s disease and other neurological conditions. The studies showed potential for therapeutic use, and there is even [clinical evidence that oxiracetam can help restore memory](#), but it has not been explicitly approved for any specific use by the USFDA. Oxiracetam is currently unregulated in the US, Canada, Australia, and the UK.

## BENEFITS AND EFFECTS

Oxiracetam is one of the most popular nootropics, well known and highly regarded for its outstanding cognitive enhancement properties and mild stimulant capability. It has also been proven to be safe and well tolerated even at high dosages, and its

moderate cost, ready availability and “stackability” make it a must-have for many nootropic users. Some of oxiracetam’s benefits include the following:

- ▣ **Improved Memory**

Oxiracetam has been shown to improve memory in general, enhancing both memory formation and retention and exerting a significantly positive effect on the speed of recall. Users have noted that this function is particularly useful when taking exams or studying math or logic-intensive subjects, though it can be a substantial aid in the study and retention of conceptual and creative subjects as well.

- ▣ **Logical/Technical Thinking Enhancement**

While the overwhelming majority of users cite overall learning and memory improvements as major benefits of oxiracetam, a significant percentage of users also report that they experience dramatic improvements in logical and technical thinking ability. Some users also report that oxiracetam improves their analytical and reasoning skills

- ▣ **Learning Enhancement**

Virtually all oxiracetam users agree that the supplement makes learning faster and easier, and [animal studies have shown this to be true](#). This effect may be due in part to the greater ease and speed of both memory formation and recall that the supplement creates, but it is also believed to be attributable to an easier and more fluid “thought flow” that most oxiracetam users experience.

- ▣ **Concentration and Focus**

Oxiracetam is well known for improving users’ overall concentration and focus, making it easier to “stick to” a subject for longer periods without waning interest or attentiveness. Though many racetam class supplements have this capability to some extent, oxiracetam’s particular potency in this area makes it a student favorite, especially at exam time.

- ▣ **Sensory Perception**

Many users report that they experience definite improvements in sensory perception when taking oxiracetam, with sounds seeming deeper and more complex and visual perceptions being more colorful with greater contrast. This phenomenon may be due at least in part to increased left brain function when taking oxiracetam.

- ▣ **Increased Physical and Mental Energy**

Oxiracetam acts as a mild central nervous system stimulant, increasing both physical and mental energy without the nervous or jittery feelings that amphetamines and other CNS stimulants may create. Most users consider



this aspect to be among the supplement's most beneficial effects, particularly when studying or preparing for exams.

## HOW IT WORKS

While its exact mechanisms of action are not completely understood, oxiracetam's actions are similar to those of other racetam-class supplements, which enhance cognitive function by stimulating specific neurotransmitter receptor sites and directly modulating the production and release of certain brain chemicals.

Oxiracetam affects both the cholinergic and glutamatergic systems and directly modulates the release of their respective neurotransmitters acetylcholine and glutamate. Both are crucial to memory, learning, and overall cognitive function. This action is similar to that of other racetams, including piracetam, but oxiracetam's effect is more potent and long-lasting.

It has also been shown to enhance neuronal communication, particularly in the hippocampus, by affecting lipid metabolism and stimulating the release of D-Aspartic acid. Both of these actions have the effect of improving neural signaling.

Oxiracetam is known to act as a mild central nervous system stimulant. This effect may be attributable in part to the fact that it is an ampakine, a compound that interacts with the glutamatergic AMPA receptors. Ampakines are classed as stimulants but appear to lack many of the classic adverse side effects, such as sleeplessness and feelings of nervousness, that are strongly associated with other stimulants such as amphetamine, caffeine, and methylphenidate (Ritalin).

Oxiracetam is a water soluble compound that is absorbed from the gastrointestinal tract, reaching peak levels within 1-3 hours of ingestion. It has been shown to cross the blood-brain barrier within an hour of ingestion, and it has a relatively long half-life of 8-10 hours.

## DOSAGE

Oxiracetam is extremely well-tolerated, and no serious side effects have been reported, even when taken at high dosages. Nonetheless, it's important for users to bear in mind that it's a very potent supplement that should be used responsibly.

Recommendations for daily dosage vary considerably, ranging from 800 to as much as 2400 mg or more per day, ingested at intervals and taken in two to three doses. Though [studies using higher cumulative daily doses have shown no adverse effects](#), it is always wise to begin with the lowest possible effective dosage and gradually increase as needed.

For most people, a daily dosage of 800 to 1200 mg split into two or three 400 mg doses would be considered both safe and effective. Oxiracetam is water soluble and mixes readily, so it can be taken in either capsule or powder form as well as taken with or without food.

While some users advocate the initial use of an “attack dose,” a high dosage designed to quickly build to maximal effects when starting to use a racetam-class nootropic, this is an approach that should be considered with caution. While high doses can potentially deliver maximum effects in minimum time, they also significantly increase the possibility of unwanted side effects such as headaches. For a supplement like oxiracetam, which is known for its mild but noticeable stimulant properties, very high initial dosages are even more likely to result in unwanted and unpleasant side effects.

## STACKING

Oxiracetam works exceptionally well as a cognitive enhancer and mild central nervous system stimulant, both on its own and in combination with other supplements.

It's important to remember that when racetams are stacked their effects may be multiplied rather than simply increased additively, so it's best to have a good idea of how each supplement individually affects you before using them in combination.

Here are some example oxiracetam stacks for some stack ideas.

### Oxiracetam and Choline Stack

It's important to maintain sufficient choline in the system when taking oxiracetam or any racetam-class nootropic, so it's a good idea to include a good choline source in your daily regimen. Doing so will not only help maximize the effect of oxiracetam, but it will also go a long way toward eliminating headaches, which are the most commonly reported side effect.

### 1x-2x per day

- ▢ 800 mg [Oxiracetam](#)
- ▢ 300 mg [Alpha GPC](#)

## Oxiracetam and Pramiracetam Stack

Oxiracetam stacks particularly well with other racetams. When stacked with pramiracetam, it can enhance and extend the powerful cognitive enhancement effects of both supplements and the mild CNS stimulation it provides can improve feelings of alertness and mental energy.

### 1x-2x per day

- ▢ 800 mg [Oxiracetam](#)
- ▢ 200 mg [Pramiracetam](#)

## Oxiracetam and Aniracetam Stack

When stacked with aniracetam, which like oxiracetam is an ampakine, the powerful cognitive enhancement and mild stimulant properties of both supplements work very well together, with the distinct mood-elevating and anxiety-lessening effects of aniracetam creating an effect that users describe as mellow and pleasant.

An example oxiracetam and aniracetam stack may look like this.

### 1x-2x per day

- ▢ 800 mg [Oxiracetam](#)
- ▢ 800 mg [Aniracetam](#)

## SIDE EFFECTS

One of the most interesting aspects of oxiracetam is its lack of documented serious side effects. Even when taken in high dosages it has been shown to be safe and non-toxic, and when taken responsibly it has an exceptionally low rate of side effects.

The most commonly reported unpleasant side effect of oxiracetam, and indeed of all racetam-class supplements, is a headache. Headaches are usually related to

either high dosage or choline depletion, therefore, adding a good choline source to your regimen or reducing the amount of oxiracetam ingested can often eliminate the problem.

Users taking particularly high doses of oxiracetam have also reported temporary indigestion and gastric distress that was alleviated by reducing dosage.

Because it does have mild stimulant properties, oxiracetam could potentially interfere with normal sleep cycles if taken too late in the day. Side effects of insomnia and nervousness, while rare, have occasionally been reported. These effects can be successfully ameliorated by taking oxiracetam earlier in the day or adding aniracetam which has anti-anxiety properties.

## WHERE TO BUY

Oxiracetam can be purchased online via vendors that specialize in nootropics.

We recommend that you buy oxiracetam from [AbsorbYourHealth.com](https://AbsorbYourHealth.com), a popular source of nootropics due to their competitive pricing and high-quality products that are all tested for purity by 3rd party laboratories.

## CLOSING THOUGHTS

Oxiracetam is one of the most popular nootropics, considered by many users to be a must-have for use on its own or in combination with other supplements. It's an excellent choice for students, researchers, writers, or anyone that needs sustained mental energy for processing information over extended periods of time.

Its benefits include powerful enhancements across the full spectrum of cognitive processes; it makes learning faster and easier, improves memory formation and retention, increases focus, attentiveness, and concentration, and is believed to enhance logical and technical thought processes.

Most users report that it also has significant positive effects on sensory perception, making music and other sounds more deep and complex and adding sharp contrast and definition to visual stimulation.

Because oxiracetam also works as a mild central nervous system stimulant, it increases alertness, motivation, and mental and physical energy but does so

without the nervousness, jittery feelings, sleeplessness, and other adverse side effects that are associated with CNS stimulants. This effect, in combination with its powerful cognitive enhancing properties, make oxiracetam an attractive choice for studying or mentally taxing activities that extend over sustained periods.

Oxiracetam is known to be safe and non-toxic even at high dosages, associated with virtually no serious side effects. It works well on its own and in combination with other supplements and is considered by many to be a worthy component of any nootropic stack.



# PHENIBUT

Phenibut is a nootropic supplement similar to the neurotransmitter GABA. It has the ability to reduce anxiety and improve sleep while providing a clear mindset. Phenibut is potentially addictive therefore needs to be used responsibly, if at all.

## SUMMARY

Phenibut is not as known nor does it have as widespread use as other nootropics such as piracetam, Alpha GPC, caffeine, or L-theanine. However, phenibut has demonstrated numerous benefits over tens of decades through both formal studies and anecdotal documentation.

Phenibut is a nootropic supplement designed to simulate the naturally occurring inhibitory neurotransmitter  $\gamma$ -aminobutyric acid (GABA) that acts on the central nervous system.

It is sold as a psychotropic with a positive effect on mental ability and improved neurological functioning. The anxiety-reducing effectiveness of phenibut is widely accepted. Once anxiety is addressed and improved, natural sleep patterns and enhanced cognitive processes often follow.

The supplement was discovered in the Soviet Union nearly half a century ago. An interesting, documented anecdote is that Russian cosmonauts were approved to supplement with phenibut. In fact, phenibut was part of the 1975 joint USSR – US mission Apollo-Soyuz.

Today, it is used in Russia to treat a variety of ailments in addition to anxiety.

## BENEFITS AND EFFECTS

[Anxiety-reduction](#) is the most commonly recognized benefit of phenibut and was documented by Izyaslav Lapin. Anxiety may be caused by the brain focusing on and overworking unimportant details. Turning off this distracting neuron processing may free the person to process a broader, more productive range of stimuli.

## **Reduces Social Anxiety**

This anxiolytic effect can lead to more rewarding social interactions. There is some limited research supporting enhanced cognitive processing following phenibut consumption, but the primary and supported benefit is anxiolytic.

People that have sought to improve their interactions in social settings have reported better results with the supplement than with alcohol or prescription anxiety medications. Attempted stress and anxiety reduction using traditional tranquilizers often leads to sleepiness and reduced cognitive ability. This undesired side effect isn't present with phenibut supplementation.

## **Restores Healthy Sleep Patterns**

People living through depression, anxiety, stressful life events, and hormonal changes, like menopause, often report deteriorating sleep quality. Some have been unsuccessful using melatonin and are unwilling to use pharmaceutical sleep aids. The lack of quality sleep can create an unbroken cycle of impaired cognitive processing, leading to more anxiety, and resulting in even more lost sleep. Phenibut used as an ataractic supplement or sedative can restore helpful, natural sleep patterns, duration, and quality.

We recommend phenibut to persons who are just beginning to experience sleep problems. The ability to fall asleep, remain asleep, and maintain extended periods of healthy, refreshingly deep sleep may be restored quickly with the aid of the supplement. Recapturing healthy sleep patterns early in the destruction process can head off cognitive and emotional problems down the road that may result from the exhaustion.

## **HOW IT WORKS**

Gamma-aminobutyric acid (GABA) is a naturally occurring brain inhibitory neurotransmitter. The blood-brain barrier makes taking supplements of GABA ineffective, but phenibut can cross the barrier because it has an additional phenyl group molecule or ring. Once in the brain, it slows down the neuronal process. GABA opens up channels in the neurons, decreases the function of other neurotransmitters, and reduces collective anxiety in the neuron. It is not exactly clear if phenibut binds to the GABA receptor or not. Studies have shown that it does and others that it might but only in high concentrations.



Lapin's study also found that phenibut increases levels of the body's dopamine. Dopamine is a well-known, often-studied neurotransmitter in the central nervous system that has been shown to regulate emotion and promote motivation and happiness. It is believed that dopamine depletion leads to Parkinson's disease.

## **DOSAGE**

Phenibut is a powerful compound that is best started at a low dosage with careful monitoring.

While the exact ideal phenibut dosage is not known and can vary from person to person, many users report that that 250 mg daily helps them to operate at their optimal level. Others have needed slowly to increase ingestion, gradually reaching levels closer to the 1000 mg daily target. Phenibut lasts up to 24 hours in the human body, so once a dose is ingested, it is best to wait for the supplement to be fully assimilated before further dosing.

We reiterate that this supplement must be started out slowly. Some people have found that starting with larger doses has resulted in feelings of "drunkenness" and other undesired, but avoidable, side effects. On the other hand, others have found phenibut to be an effective anxiety reducer and sleep promoter for them when other products have failed.

## **STACKING**

Stacking is the term used when two or more nootropic supplements are taken to derive synergistic benefits through the presence of the other components. This practice has commonly been among nootropic users. An example of this is combining a racetam, like piracetam, with a choline source such as Alpha GPC.

When it comes to phenibut, it is sometimes added to people's stacks simply to reduce anxiety on days that are extra stressful.

### **Stack for Mood and Anxiety**

Because phenibut has known anxiety-reducing and quality sleep-generating results, the supplement should be a consideration for any mood enhancing stack. A fairly

powerful stacking option to address anxiety, mood control, or sleeplessness is a combination of phenibut, phosphatidyl serine, and bacopa monnieri.

## **Stack for Athletic Recovery**

Today, extreme athleticism seems to be the lifestyle of many weekend warriors. Athletes seeking an additional edge or extra help with hard training may consider a recovery stack. Phenibut in combination with L-theanine and centrophenoxine could help to reduce body soreness, help to motivate to a new strength or endurance level and result in enhanced muscular development.

## **SIDE EFFECTS**

Whenever a new food, supplement, or medication is introduced, the best source of criticism is the human body itself. Any person deciding to take supplements of phenibut should start with a low dose and be tuned into the feedback provided by his or her body.

In addition to the “drunkenness” feeling that overdosing can produce, other side effects may include lightheadedness and dizziness. Other users have reported fatigue, nausea, and stomach discomfort following ingestion of phenibut. Furthermore, individuals on epilepsy medication or MAO inhibitors should consult with their doctor before taking phenibut.

Alcohol should be avoided when taking phenibut due to synergistic effects.

Phenibut should not be supplemented daily. It has the potential to be addictive, especially when taken excessively. If taken regularly, tolerance will also be developed reducing its efficacy. Limiting usage, as others have, to a couple of times each week will minimize the possibility of addiction and tolerance.

You may want to consider using it only when you know you will be in an anxiety-inducing situation or find that stress or anxiety have become disruptive to your sleep schedule.

We encourage you to respect the power of phenibut. It would also be wise to speak to a medical professional before taking phenibut, especially if you are on any other medications or have an existing medical condition.

## WHERE TO BUY

Phenibut can be purchased online in bulk powder form from specialty vendors. We recommend [AbsorbYourHealth.com](https://AbsorbYourHealth.com) as a trusted source for ordering phenibut or any other nootropics that you may be looking for.

## CLOSING THOUGHTS

Phenibut is an effective anxiety-relieving supplement without causing the drowsiness that often accompanies other anxiolytics.

If you are in need of a supplement with a proven history of anti-anxiety, sleep-promoting, cognitive-enhancing benefits, phenibut is a worthy option.

Proceed with caution if you decide to use phenibut as it can be dangerous if used improperly.



# PHENYLPIRACETAM

Phenylpiracetam is a lesser-known member of the racetam family of nootropics but has seen an increase in popularity over the past couple of years. Not only is phenylpiracetam a powerful cognitive enhancer, it is also unique in its ability to boost athletic performance.

## SUMMARY

Phenylpiracetam is one of the most potent nootropics that are available on the market today. It is a relatively new nootropic from the racetam family and is a modified version of the original nootropic piracetam, except it is estimated to be 30 to 60 times more powerful, have better neuroprotective properties, and enhances physical performance. For all these reasons, phenylpiracetam is rapidly gaining prevalence among nootropic users.

Structurally, phenylpiracetam is essentially [piracetam](#) with a phenyl group attached to it. That makes it quite similar to piracetam, its parent molecule, but the addition of the phenyl group improves it in the following two ways:

1. **More Potent** – Increased potency and stronger effects by allowing the molecule to pass the brain-blood barrier (BBB) easier.
2. **Energizing** – More stimulating effects due to a closer resemblance to a phenethylamine substance, such as Adderall.

In comparison to [other racetams](#), phenylpiracetam is quite potent and has a high bioavailability even when ingested orally. Its half-life is around 3-5 hours in humans.

## BENEFITS AND EFFECTS

Phenylpiracetam increases memory and overall cognition more effectively than piracetam, protects the brain, and has been reported to enhance physical performance. Phenylpiracetam is a great addition to any nootropic stack due to its effects and potent nature. Specifically, athletes and students may benefit the most due to its stimulating and motivating properties. Not to mention, it provides an increased tolerance to stress which is a valuable bonus.

Phenylpiracetam has even been given to Russian soldiers and astronauts for its ability to enhance the performance of both the mind and body.

In studies, phenylpiracetam has shown the following effects.

- ▣ Improve memory, attention-switching, and problem-solving skills in patients with asthenia.
- ▣ Increase locomotor and antidepressant activity and improve memory in rats.
- ▣ Shown to prevent and reduce the effects of Amnesia.
- ▣ Ability to suppress the anxiety and fear response in rats with induced immune stress.
- ▣ Reported to reduce the effects of sleep deprivation for the duration of its effects by many users.
- ▣ Reduces the effects of cold on our body by increasing one's tolerance to it.

## For Studying and Learning

The benefits of phenylpiracetam are especially useful for studying and learning. Its stimulating nature is great for an otherwise sleep deprived cram session, pretest focus aid, or just a general cognitive study enhancer. Its effects on memory allow for complete retention enhancement. Motivation and mood enhancement allow for general better study as well. Finally, its ability to reduce the effects of stress and anxiety should allow for better studying under pressure.

## For Athletes

Phenylpiracetam is also great for working out and enhancing athletic performance. It reduces the negative effects of stress on your body, which is invaluable for an athlete, increasing stamina, recovery, and endurance. This increased tolerance to stress also includes increasing your body's tolerance to cold.

Phenylpiracetam also provides an energy similar to that of an amphetamine. Clean, focused, motivated energy without caffeine jitters is ideal in a compound to help optimize your performance during workouts or competitions. There also is little to no crash, even when compared to caffeine.

Professional athletes should note that phenylpiracetam is on the World Anti-Doping's [banned substance list](#) and should decide on phenylpiracetam supplementation accordingly.

## HOW IT WORKS

While the benefits of supplementing phenylpiracetam have been demonstrated inside and outside the lab, its exact mechanism of action is not fully understood.

Phenylpiracetam's energy boosting properties likely exist due to its close resemblance those of phenylethylamine, an organic compound which is known for its stimulatory effects. The benzene ring of the phenyl group likely also increases the affinity for neurotransmitter (norepinephrine and dopamine) transporters.

## DOSAGE

A typical dose of phenylpiracetam ranges from 100-200 mg per dose, taken up to three times a day. Due to its potent effects, it is recommended to start at the lower end of the dosage range and then increasing if necessary.

Tolerance to phenylpiracetam is reported to develop relatively quickly. Therefore, it is not advised to take it as a daily supplement but instead as a tool to augment your abilities when you need it the most or to cycle it periodically.

## STACKING

Here is an example of how to include phenylpiracetam into your nootropic stack regimen.

### Daily

- ▣ 250 mg [Alpha GPC](#)
- ▣ 1 dose [Fish Oil](#)
- ▣ 1 dose [Multivitamin](#)

### As Needed for Studying/Workouts/Tests

- ▣ 100 mg [Phenylpiracetam](#)
- ▣ 500 mg [Sulbutiamine](#)

This stack is especially suitable for students or athletes. A healthy balanced daily routine while saving the powerful effects of phenylpiracetam for when it is needed most, enhancing just about every aspect of your mind and body.

Expect enhanced motivation, focus, energy, a reduced need for sleep, increased stamina, and better mood.

Phenylpiracetam is an excellent example of the potential of nootropics.

## **SIDE EFFECTS**

Like other nootropics in the racetam class, there are few reported side effects from supplementing phenylpiracetam when taken at the recommended dosages. If you do experience headaches, it may be a sign that you should add or increase your choline supplementation, which is usually recommended when taking racetams.

## **WHERE TO BUY**

Phenylpiracetam can be ordered online from [PeakNootropics.com](https://PeakNootropics.com). They are one of our favorite suppliers for our nootropics, their packaging is fantastic, and their batches are tested for purity by third party labs. Stick with a vendor that is proven to be trustworthy when buying your nootropics.

## **CLOSING THOUGHTS**

Phenylpiracetam is quickly gaining popularity with nootropic users for its powerful effects. Consider trying it out as an interesting alternative to the more common racetams. As always, it is recommended to start out by taking a low dosage, without other nootropics, to gauge your sensitivity to it.





# PICAMILON

Picamilon is a unique nootropic that improves cognitive function and increases mental energy while decreasing feelings of stress and anxiety. Its distinctive combination of energizing and relaxing effects make picamilon an excellent supplement for students facing exams or for anyone who needs to think quickly and clearly in stressful situations.

## SUMMARY

Picamilon's diverse effects make it a truly unique supplement. Like all nootropics it boosts brain function, improving memory, concentration, motivation, attention span, and general productivity. But its energizing effects are only half the picture; it also calms, relaxes, and produces a tranquilizing effect that significantly reduces feelings of stress and anxiety.

This combination of energizing and calming effects, along with its low cost, ready availability, and lack of serious side effects, makes picamilon an increasingly popular choice for anyone who wants to manage stress and anxiety while maximizing their cognitive abilities.

Picamilon was developed in Russia sometime between 1969 and 1971. The product of the Soviet Union's All Union Vitamin Research Institute, picamilon was synthesized as part of the Institute's research into potentially performance-enhancing substances.

Today picamilon is sold in Russia as a prescription drug and is used for the treatment of a variety of illnesses and disorders, ranging from depression to migraine, neuroinfections, senile psychosis, certain types of glaucoma, and even acute alcohol intoxication. It is unregulated in the US, where it is sold as a dietary supplement.

## BENEFITS AND EFFECTS

Picamilon's broad range of effects include both cognitive enhancement and mood management, as follows:

- ▣ **Learning and Memory Enhancement**  
Picamilon has been shown to make learning faster and easier and to [improve both memory retention and the speed of recall](#).
- ▣ **Better Concentration, Alertness, and Mental Stamina**  
By stimulating [better flow and circulation of blood in the brain](#), picamilon has significant positive effects on a wide array of cognitive functions, including increasing the ability to focus thought and enhancing overall mental energy or stamina.
- ▣ **Mood Stabilization**  
Picamilon has been shown to have powerful anti-anxiety effects, markedly reducing the effects of stress. It may also help alleviate depression.
- ▣ **Brain and Body Relaxation Without Sedation**  
Users report that taking picamilon results in a feeling of pleasant relaxation without the mental fog or grogginess that is generally associated with sedatives or tranquilizers. Most people say it gives them a feeling of “calm energy”.
- ▣ **Lowers Blood Pressure**  
While not a positive in all cases, picamilon’s ability to lower blood pressure can be a significant benefit to those with hypertension that is increased by stress and anxiety.
- ▣ **Improves Sleep**  
Though it seems contradictory for a single supplement to both improve energy and make for better sleep, many picamilon users say it does just that. Since it is not a tranquilizer, sedative, or muscle relaxer, this effect could be due in large part to picamilon’s stress reducing and anti-anxiety properties.

## HOW IT WORKS

Picamilon is actually a combination of two common but essential nutrients, niacin and [GABA or gamma-aminobutyric acid](#). Separately each plays an important role in brain health, but bonded in compound they react synergistically to create unique benefits.

The true power of picamilon is in the niacin component’s ability to cross the blood-brain barrier, a semi-permeable capillarial filter designed to protect the brain, and take the bonded GABA component with it. GABA, a powerful neurotransmitter that cannot cross the blood brain barrier on its own, is thus transported into the central nervous system for use throughout the brain and body.

The actual mechanism of action through which picamilon works is both rapid and direct. It is a water-soluble compound that is absorbed readily and reaches maximum bioavailability within an hour of ingestion.

After crossing the blood-brain barrier picamilon is hydrolyzed, or chemically split back into separate components niacin or nicotinic acid and GABA. [The niacin component acts as a vasodilator](#), increasing blood flow in the brain and improving the absorption of oxygen and other nutrients. At the same time, the [GABA component increases brain levels of this important inhibitory neurotransmitter](#), which acts by reducing neuronal excitability.

Picamilon's cognitive enhancement effects can be attributed in large part to the increased efficiency that increased brain blood circulation and oxygen absorption creates. The increased blood flow in the brain also improves the delivery and absorption of glucose and other nutrients, which can increase alertness, focus, motivation, and overall brain energy. It is also believed to have a significant antioxidant effect, helping to break down and remove toxins in the brain.

The relaxing and calming effects of picamilon are created by the increased levels of GABA, a potent neurotransmitter that acts by inhibiting neuronal firing, reducing feelings of stress and anxiety by producing a mildly sedative effect.

## DOSAGE

Though picamilon is generally considered to be well-tolerated and mainly without serious side-effects, it is a very potent supplement and should be used responsibly. As with all supplements, it is wise to start with the lowest possible effective dosage and increase gradually as needed.

Recommendations for daily dosage vary considerably, depending to a large extent on the particular effects that you hope to experience. A cumulative dosage of between 50 and 400 mg per day is typical, with most users finding efficacy somewhere between 100 and 200 mg split over two to three doses. However for those who are primarily interested in picamilon's cognitive enhancements and general mood stabilization lower dosages may prove to be best, while those seeking substantial increases in energy levels may wish to build to higher dosages.

Picamilon works relatively quickly and is fairly long-lasting. Users say effects are generally noticeable within an hour of ingestion and last for 4 to 6 hours. It is water-

soluble and can be taken in either capsule or powder form, preferably on an empty stomach.

While some users prefer to cycle picamilon with other nootropics that have an anti-anxiety component, there is no evidence that taking it on a daily basis has any adverse effect.

## STACKING

Picamilon is effective in many modes: it can be taken alone on a daily basis, cycled with other supplements, or combined with other nootropics.

In a stack with racetam-class nootropics such as piracetam or pramiracetam, picamilon's cognitive enhancement properties will definitely be potentiated. However depending on which racetam supplement you combine with picamilon, you could also experience heightened energy or relaxation effects, or even both. In combination with ampakine racetam supplements such as aniracetam and oxiracetam, both of which have stimulant properties, picamilon's energy-boosting and mood-modulating effects will be enhanced.

Some users say combining picamilon with other supplements such as kava can increase its energy producing properties, while using it in combination with relaxant supplements like valerian will make its calming properties stronger.

## SIDE EFFECTS

Picamilon is generally considered to be safe and well-tolerated, but some side effects have been reported. The most serious potential side effect is low blood pressure, so if you know you are prone to hypotension or have any reason to be concerned with low blood pressure you should consult a medical professional before taking picamilon.

Allergies and skin rashes have been reported as side effects, but they are not common. Typically reported side effects include headaches, lightheadedness or dizziness, and nausea. Red flushing of the skin, [a common and basically harmless side effect of niacin](#), is also occasionally reported.

## WHERE TO BUY

Picamilon can be found at specialty supplement and nootropic vendors online. We recommend purchasing picamilon from [ThoughtFoods.com](https://ThoughtFoods.com) as they are our favorite supplier based on the fact that all their products are tested for purity by 3rd party laboratories and their prices are very competitive as well.

## CLOSING THOUGHTS

Picamilon is a popular nootropic, and with good reason: it can both energize and relax, it's safe and well-tolerated, it has very few reported side effects, it mixes well with other supplements, and it's affordable and readily available. For anyone who wants or needs to manage their moods and maintain optimal cognitive function under stress, picamilon offers benefits that are hard to beat.



# PIRACETAM

Piracetam, also known by its trade name Nootropil, is a revolutionizing member of the nootropic category of supplements. It was originally synthesized over 50 years ago as a cognitive booster and still remains a popular choice for nootropic users.

## SUMMARY

Piracetam is a nootropic supplement that has the ability to enhance memory and has stood the test of time making it a popular choice for those that want to enhance their cognitive abilities. It is known to allow your creative and logical thoughts to run together into a stream of higher level thinking and can increase the amount of knowledge that your brain can retain for later access.

It was first invented by the Romanian psychologist and chemist Dr. Corneliu E. Giurgea, over 50 years ago, with the purpose of creating a supplement that could enhance memory and the ability to learn.

It is used medicinally in Europe, Russia, South America, and many other places to treat myoclonus; however, because of its nootropic effects, it is used off-label for many other applications. Some believe it can even be used to reverse the effects of Alzheimer's disease or dementia in the elderly. There is even evidence that it can prevent brain damage caused by excessive alcohol intake or hypoxia.

Chemically, it is known as 2-oxo-1-pyrrolidine acetamide, a cyclic derivative of GABA.

## BENEFITS AND EFFECTS

Piracetam is most known for its [ability to enhance cognitive functions, even in healthy adults](#).

Piracetam's effects are considered less strong compared to its more modern counterparts but still remains a very popular choice for a well-rounded nootropic supplement that has stood the test of time.



Medical studies have also shown piracetam to be beneficial in treating conditions that affect the brain such as [alcoholism](#), [Alzheimer's disease](#), and [children with dyslexia](#). Despite its clinical use, it is commonly used by healthy individuals that would like to expand their cognitive functions.

## HOW IT WORKS

Interestingly enough, piracetam doesn't seem to show any effect on the GABAergic system even though it is a cyclic derivative of GABA. Piracetam's mechanism of action is related to how it increases the activity of acetylcholine, a neurotransmitter that is involved in memory function. It works to increase memory by making the transfer of acetylcholine more effective. It also affects NMDA glutamate receptors which also play a role in the memory formation and learning processes. Scientists believe piracetam works through these possible mechanisms in the brain:

1. Compromised neuronal cells experience a loss of fluidity which prevents signaling molecules from crossing the lipid bilayer membrane of the corpus callosum, the part of the brain separating the left and the right hemispheres. It is believed piracetam can restore or even increase in the membrane fluidity of these neuronal cells, making neurotransmission a more effective process.
2. Protein synthesis is an important part of memory-storage in the brain. Piracetam can possibly cause an increase in learning and memory when they are transported by various steroids in the brain. It was noted that when steroids in the brain were blocked, the effects of nootropics were blocked as well.
3. Recruitment of AMPA receptors that are not normally part of synaptic transmissions, essentially making more receptors available, when would certainly cause an increase in learning.
4. And of course, acetylcholine increases and increased transmission of this critical neurotransmitter which is one of the most important in memory storage and learning processes.

## DOSAGE

Based on scientific research, there have been studies that conclude that the optimal [single dose size of piracetam for an increase in cognition for adults has](#)

[been shown to be 4800 mg](#). The dose is often recommended to be taken two or three times a day, as needed.

Other studies used smaller dosages that also had measurable positive effects on cognition. For example, one study found [improved cognition after 14 days of supplementing 1200 mg \(split into three doses\) per day](#).

Nootropics users self-report very broad dosage ranges, but we recommend starting low and building up slowly to see how your unique biology responds to piracetam.

Keep in mind that these recommended dosages are for when piracetam is taken on its own without being stacked with other nootropics.

You will likely notice positive effects the first time you take piracetam but it may take up to two weeks of daily supplementation for the full effects to be experienced. To speed up the process, some people claim that you can take an “attack dose” of double or triple the size of the regular dose for a few days before reducing intake to normal daily dosages as a means to create a buildup of piracetam in the body however there is limited evidence that this is effective.

Even though piracetam is considered to be one of the safest nootropics, it's always wise to start with a smaller dose to ensure you react well to it.

## STACKING

Piracetam works best taken with a stack of supplements but can certainly be taken on its own.

### Piracetam and Choline Stack

Choline supplementation is essential if you are going to take piracetam because of the way it affects acetylcholine in the brain. When supplementing piracetam, you are using more acetylcholine due to the increased communication between neurons in the left and right hemispheres of the brain and, without choline supplementation, it's possible to reach depleted levels of acetylcholine in the brain, leading to a foggy feeling and headaches. Stacking piracetam with choline not only mitigates negative side effects but allows the piracetam to be even more effective than without it.

There are various choline sources but we recommend alpha GPC or citicoline. When using a high-quality choline source such as those, a good starting point is 1 part choline for 8 parts piracetam.

#### 1x per day

- ▢ 4800 mg [Piracetam](#)
- ▢ 300 mg [Alpha GPC](#)

### Piracetam and Aniracetam Stack

Piracetam is also commonly stacked with other racetams. When combined with another nootropics, the results are usually synergistic. Let's use the popular choice of aniracetam for our example, which is often praised for its excellent effect on memory and mood.

The commonly recommended ratio is 4:1 of piracetam to aniracetam. Remember, when stacking, the potency of each individual nootropic increases, therefore it's important to adjust dose sizes accordingly. Also, don't forget your choline source.

#### 1x-2x per day

- ▢ 2000 mg [Piracetam](#)
- ▢ 500 mg [Aniracetam](#)
- ▢ 400 mg [Alpha GPC](#)

## SIDE EFFECTS

Side effects from piracetam are considered very rare. The entire racetam family of nootropics has been shown to be extremely safe with low toxicity rates. The few reported adverse effects include headache, anxiety, and insomnia. Headache is the most widely reported side effect which can often be remedied by stacking with a choline supplement.

Piracetam has been observed in clinical studies including Alzheimer's patients taking 8 grams per day without any reported side effects.

## WHERE TO BUY

Piracetam is not generally found in regular stores and instead must be purchased online from specialty vendors. We suggest that you buy piracetam from [PeakNootropics.com](https://PeakNootropics.com) as they are our recommended supplier for nootropics. All their nootropics are tested for purity by 3rd party laboratories so you can be confident that you are getting what you pay for.

## CLOSING THOUGHTS

Overall, piracetam is one of the most basic brain boosting nootropics out there. It has very noticeable effects on increasing memory and learning capabilities, and certainly has the potential to enhance cerebral performance.

If you are a student looking to get the edge on your academics, or merely someone who just wants to think smarter and faster in their day to day life, this is a great nootropic to start with to introduce you to the world of nootropics.



# PRAMIRACETAM

Pramiracetam is a true brain booster that can improve memory, concentration, and especially focus. One of the strongest nootropics available, its unique properties make it a powerful brain performance optimizer on its own and an invaluable addition to other nootropics.

## SUMMARY

Pramiracetam is one of the most interesting nootropics available, offering the greatest potency of any of the racetam-class supplements.

Its unique action optimizes overall brain function, improving memory, learning capacity, focus, and even sensory perception.

It works well on its own and can be an invaluable addition to other nootropics, enhancing and extending their effects.

Rapidly becoming a favorite with students, writers, and anyone who is interested in maximizing their mental abilities, pramiracetam is new to many people but is starting to get well-earned recognition as an outstanding nootropic.

Pramiracetam is a synthetic derivative of piracetam, discovered and developed by Parke-Davis in the 1970s. It is a particularly potent supplement, estimated to be from 5-30x more potent than piracetam.

It is sold in Europe under the brand names Neupramir, Pramistar, and Remen and is prescribed there for treatment of dyslexia, ADHD, dementia and memory problems caused by Alzheimer's disease and other neurological conditions.

It was patented in the US in 1979 but is not approved by the USFDA for any particular use. However, it has been extensively studied as a [potential treatment for cognitive problems and memory loss associated with Alzheimer's disease and brain injury](#). It is also being studied as a [treatment for a variety of central nervous system disorders](#).

## BENEFITS AND EFFECTS

Pramiracetam optimizes brain performance and provides marked cognitive improvement, particularly regarding memory formation and retrieval.

Because it often creates a noticeable feeling of focus along with a certain amount of emotional blunting, it is often compared to Ritalin. Some of the most widely-recognized benefits of pramiracetam are as follows:

- ▣ **Improved Memory** – Because it stimulates the hippocampus, the part of the brain primarily responsible for the creation of new memories, pramiracetam is known as a very powerful memory enhancer. Most users report significant improvement in memory formation and speed of recall, a claim that has been corroborated by [animal studies](#).
- ▣ **Expanded Learning Capacity** – Users report that pramiracetam makes learning faster, easier, and more enjoyable. This can be explained at least in part by pramiracetam's facilitation of greater neuroplasticity.
- ▣ **Mental Alertness and Clarity** – Typically users report that taking pramiracetam gives them strong feelings of mental alertness, focus, rapid idea formation, and clear thinking.
- ▣ **Social Fluency** – Many users say that taking pramiracetam helps them enjoy and fully participate in social situations, a benefit that is likely related to the supplement's overall brain function optimization but could also be somewhat related to its emotional blunting effects, which may reduce social anxiety.
- ▣ **Improved Sensory Perception** – Users often report enhanced or improved sensory perceptions, including amplified and richer sound and clearer and more vivid visual perception with greater color contrast.
- ▣ **Memory Repair** – In limited clinical trials, pramiracetam has been shown to be an [effective treatment for memory loss and other cognitive problems caused by brain injuries](#). It is also one of the various nootropics that have been tested in the US as a possible treatment of memory loss related to Alzheimer's disease and other neurological disorders. One study has even shown it to be [capable of reversing chemically induced amnesia in healthy volunteers](#) from 18-65 years of age.

## HOW IT WORKS

Like most nootropics, pramiracetam affects the release of neurotransmitters, brain chemicals that transmit signals from one nerve cell to another. But pramiracetam

does it indirectly, in a manner somewhat different from the usual actions of racetam supplements, and it stimulates the brain in other ways as well.

Unlike piracetam, Noopept, and many other popular nootropics, pramiracetam is fat soluble rather than water soluble, which means it is absorbed into the bloodstream via fatty acids. It reaches peak concentrations and maximum bioavailability relatively quickly, generally within 30 minutes, and it has a moderately long half-life of 4-6 hours.

Most racetams work by directly stimulating specific neurotransmitter receptor sites and thus increasing production and release of specific neurotransmitters, but pramiracetam doesn't directly result in changes in neurochemical levels, and it doesn't appear to have an affinity for any major neurotransmitter.

Its primary direct action is a significant [increase in high-affinity choline uptake](#) in the hippocampus, the part of the brain crucial to the formation of long-term memories.

Choline is a precursor of acetylcholine, a neurotransmitter profoundly involved in cognitive processes including learning speed, memory, and concentration.

By stimulating choline uptake, pramiracetam indirectly modulates the release of acetylcholine and stimulates increased activity in the hippocampus. Because this part of the brain is essential to memory function, the general stimulation that pramiracetam creates can improve both the formation of new memories and the retention of reference or long-term memories. The increased activity in the hippocampus also increases cerebral blood flow, which enhances alertness and improves cognitive abilities in general.

Pramiracetam may have other mechanisms of action as well. Researchers have hypothesized that in addition to its effect on the brain, [pramiracetam acts in peripheral sites outside the brain](#) that rely on the adrenal glands. Animal studies suggest that pramiracetam may also [increase or restore brain membrane fluidity](#), which facilitates cell signaling.

Unlike many other racetam class nootropics, pramiracetam doesn't appear to actively alter either wakefulness or emotional states. This can be explained by pramiracetam's limited influence on the production and release of the neurotransmitters that have the greatest effect on mood and anxiety levels such as serotonin, GABA, and dopamine.



## DOSAGE

Though pramiracetam is well tolerated even at high dosages, individual reactions vary and it's important for each user to find their own optimal dosage to maximize benefits.

Due to the lack of sufficient scientific studies, recommendations on the most effective daily dose vary considerably. Of the various studies done on testing the effectiveness of pramiracetam, they concluded that a total daily intake of 1200 mg was optimal, divided into two or three doses per day. This is likely a good starting point and on an individual level should be adjusted to find what works best for you.

While there are very few adverse side effects associated with this supplement, it is always wise to start with the lowest effective dose and increase the dose gradually as needed.

One notable aspect of consuming the powder form of pramiracetam is that it has a very pungent flavor that most people find extremely unpleasant. Many users prefer to either purchase this supplement in capsule form or to make their own capsules.

The fact that it is fat rather than water soluble means that mixing the powder with water is difficult. Rather than dissolving, it will simply float on the surface. Some users report dissolving their dose of pramiracetam powder with a small amount of oil which may also enhance absorption and bioavailability.

## STACKING

Pramiracetam works well on its own, but one of its most interesting aspects is that it appears to be a powerful potentiator for other nootropics, increasing their effectiveness.

It is a particularly effective potentiator for other racetams, making it a natural addition to most nootropic stacks.

Because pramiracetam has such potent effects, it is advisable to use it on its own for a trial period before combining it with other nootropics.

Stacking pramiracetam with an energy enhancer like adrafinil or oxiracetam can intensify the mental alertness and extend it over a longer period.

Stacking pramiracetam with a powerful anti-anxiety agent like aniracetam can give users heightened focus and concentration while improving mood and reducing feelings of mental strain and anxiety. Some users say this stack promotes social fluency and improves their public performance ability.

Adding a choline supplement to a pramiracetam stack could have multiple benefits. Not only can it enhance pramiracetam's effects, but it can also prevent headaches, which are the most commonly reported side effect.

## SIDE EFFECTS

Pramiracetam is usually well tolerated even at high dosages, and very few adverse side effects have been documented.

The most commonly reported side effect is a headache, which can usually be prevented by taking it with a choline supplement.

Less common side effects, including gastrointestinal distress and feelings of nervousness or agitation, are generally associated with high dosage and can, therefore, be avoided by reducing dosage.

Pramiracetam is non-addictive, and no significant adverse effects of long-term use have been documented. In fact, there is evidence that this supplement [may even promote brain health](#) and to some extent restore function in aging brains.

## WHERE TO BUY

It isn't usually possible to find pramiracetam in retail stores, but it is available from specialty online stores that carry nootropics. It is important to stick to vendors that you can trust.

We recommend [AbsorbYourHealth.com](https://AbsorbYourHealth.com) for ordering pramiracetam and other nootropics. All their products are tested by 3rd party laboratories for purity so you can rest assured that you are dealing with a company that stands by its products.

## CLOSING THOUGHTS

Pramiracetam is a very powerful nootropic that is relatively new to many users but is rapidly growing in popularity.

Because it's more complicated to synthesize it's higher in price than other racetams; some users find the cost problematic, though the high potency of the supplement also means that lower dosages are needed.

Users also have mixed reactions to the Ritalin-like emotional blunting effect of the supplement. For some people, it creates a welcome objectivity and relief from social anxiety, while others say it makes them feel dissociated.

Pramiracetam is widely accepted as an excellent nootropic, measurably improving memory formation and retention, learning speed, and general mental clarity, acuity, and focus. It's generally considered to be a valuable addition to other nootropic stacks, in many cases increasing both the potency of the other stacked supplements and the duration of their effects.

Pramiracetam is safe, potent, fast acting and relatively long lasting. It has been found to be a valuable nootropic supplement for students, writers, researchers, or anyone who wants better memory, faster recall, and greater mental focus, clarity, and speed of thought.



# PRL-8-53

Many nootropic enthusiasts believe that PRL-8-53 is the most effective short-term memory enhancer available on the market. There has only been one human study since it was patented 40 years ago therefore more tests are needed to confirm its safety and effectiveness. Interest in this potential powerhouse remains strong in the nootropic community.

## SUMMARY

PRL-8-53 (chemical name Methyl 3-(2-(benzyl(methyl)amino)ethyl)benzoate) is a synthetic nootropic compound discovered in 1972 and patented in 1975 by the late Dr. Nikolaus Hansl, a neuropharmacologist at Creighton University in Omaha, Nebraska.

Preliminary animal tests indicated that the compound was both safe and significantly nootropic, boosting avoidance learning in rodents with no adverse effects. But the real interest in PRL-8-53 was sparked by a 1978 study on human volunteers, which showed that a single dose of the compound could improve word retention scores by more than 200%.

Interest in the compound was further fueled by comments from author and longevity specialist Durk Pearson, who was quoted in 'High Frontiers' as follows: "PRL-8-53 is a terrific memory enhancer. Normally you can memorize about seven or eight digits just by looking at them for a second. PRL-8-53 gives the average person a memory span of about 21 to 22 digits."

The sole human study on PRL-8-53, which was funded by Hansl shortly after he patented the compound, strongly supports the drug's potential as a nootropic. The study measured word retention in a group of 30 healthy volunteers between 24 and 86 years of age. While participants who had good baseline word retention scores showed little improvements after taking PRL-8-53, participants who had low initial scores or who were over 30 demonstrated major improvement following a 5mg dose of PRL-8-53, in many cases more than doubling their rate of recall.

No adverse effects were noted in the human study.

Anecdotal evidence appears to support claims for PRL-8-53's safety and nootropic capabilities, but it is still considered an experimental drug because of limited testing.

PRL-8-53 is currently an unscheduled drug and can be legally purchased in the US.

## **BENEFITS AND EFFECTS**

**Memory enhancement** – The older subjects in [the only human study on PRL-8-53](#) demonstrated significant improvements in memory after taking a single 5 mg dose. The double-blind study used word memorization as a measure, testing the participants' ability to recall a list of 12 one-syllable words, first to establish a baseline and then again after ingesting PRL-8-53 or a placebo. The subjects were tested on their ability to recall the words 24 hours after hearing them and then again one week later.

The study results indicate that participants who had higher baseline scores showed the least improvement after ingesting PRL-8-53, while subjects who had demonstrated poorer initial memory or who were over 30 years of age showed significant improvement in recall. In an article on the test, Hansl described the effect on the older participants as follows:

"This group was age 30 or older. As might be expected, rote memory did not come as easily to this group as it did to the younger students. The average retention after 24 hours when on placebo was just under three words out of a possible 12. The average retention after one week was two words. However, the same subjects, when learning subsequent to drug administration, retained an average of 5.85 words after 24 hours and 5.25 words after one week. Again the increases were statistically significant. The improvement expressed in percent of placebo performance was 108% for the 24 hour test and 152% for the one-week recall."

Many individual nootropic users who have tried PRL-8-53 confirm its memory-boosting effects, in some cases comparing it to a more powerful version of other nootropics such as nefiracetam and Noopept.

## HOW IT WORKS

PRL-8-53's exact mechanisms of action are not well understood, but it is believed to regulate the brain's production of and response to several crucial neurotransmitters. In his reports on human and animal studies, Hansl indicated that PRL-8-53 potentiates dopamine, partially restricts production of serotonin, and enhances the brain's response to acetylcholine. Though Hansl's research report on the 1978 human study suggests those actions, it does not clearly delineate the mechanism of action.

The fact that older subjects saw the most nootropic benefit from taking the drug supports the concept that dopamine modulation plays a significant role in PRL-8-53's effects. Upregulating the normal age-related lessening of dopamine production that is associated with cognitive decline could have a significant positive impact on both learning and memory.

In a 1979 article entitled "[Learning and Memory Improvement Through Chemistry: Dream or Reality in the Offing?](#)" Hansl said "PRL-8-53 has been shown to augment responses to noradrenaline in the animal model both peripherally and centrally. Therefore, it seems reasonable to assume that a similar function may be present in humans. Translated into behavioral effects, it implies that this drug is also capable of facilitating the conversion of short-term to long-term memory, causing an increased storage of informational code."

In the same article, Hansl says, "PRL-8-53 has been shown to enhance the response to acetylcholine, the response being quantitatively similar over a considerable dose range, excluding the likelihood of accidental overdosing."

Hansl further said "The drug is not a stimulant, and in the experimental animal toxicity appears only after it is given a dose more than one thousand times as large as the projected human dose. In summary, we now have a potentially useful drug that will boost a specific chemical system in the brain, the cholinergic system, and thereby improve our ability to recall, to retrieve information from a pre-existing information pool."

## DOSAGE

The only human study on PRL-8-53 was based on the ingestion of a single 5 mg dose. There is no data on the effectiveness or potential toxicity of any other dosage in humans.

## STACKING

Due to the limited understanding of PRL-8-53's mechanism of action, it may be advised to avoid stacking it with other nootropics.

## SIDE EFFECTS

No adverse effects from a single 5 mg dose of PRL-8-53 were observed in the human study. Animal studies suggest that the compound has a high therapeutic threshold, but the evidence is very limited because no comprehensive toxicity studies have been completed.

Keep in mind, this is a highly experimental research chemical, therefore caution is advised.

## WHERE TO BUY

Because PRL-8-53 is an experimental nootropic, you'll want to be especially certain that you are actually getting the authentic compound that you've ordered.

The best way to ensure you get pure PRL-8-53 is to stick to reputable nootropic vendors. We recommend [NootropicsDepot.com](https://nootropicsdepot.com) for buying PRL-8-53 for both their reasonable pricing and the fact that all their nootropics are tested for purity.

## CLOSING THOUGHTS

PRL-8-53 is an intriguing if largely unexplored synthetic nootropic that many believe will eventually prove to be an invaluable smart drug.

Though it triggered strong interest when it was introduced 40 years ago, research on its possibilities came to a halt after a few animal tests and a single human study;



little has been learned about it since the study that sparked such strong interest in its potential as a memory enhancer.

At this time there does not appear to be any ongoing research on the compound, but curiosity about its possibilities continues and is considered to be one of the best short-term memory boosters on the market by nootropic enthusiasts.



# RHODIOLA ROSEA

Rhodiola Rosea is a natural nootropic that can help you be at your mental and physical best through busy days, hectic schedules, and long nights of work or study. It fights fatigue, boosts cognitive abilities, and protects your brain and body against the many negative effects of stress.

## SUMMARY

A high-altitude herb native to the Arctic areas of Europe and Asia, rhodiola has a long history of effectiveness as a tonic for both mind and body. It was commonly used in Chinese, Scandinavian and Russian traditional medicine as a physical restorative, and it remains a popular remedy for fatigue and “burn out” as well as a brain-boosting nootropic that is believed to improve memory and increase productivity.

New research confirms rhodiola’s physical and mental benefits as a powerful adaptogen, or compound that helps prevent the negative effects of stress. It restores energy, improves mood, and enhances cognition. It’s also believed to be an effective brain protectant that could prevent damage from toxins, and some studies suggest it may even promote longevity.

## BENEFITS AND EFFECTS

### Reducing Fatigue

Rhodiola is primarily known as an outstanding fatigue fighter, typically reducing or eliminating the negative physical and mental effects of minor physical exhaustion. It’s most effective in combating the kind of fatigue produced by prolonged or repetitive low-intensity exertion or extended periods of stress; it has been shown to increase the length of effective exercise time, but opinions vary on whether it substantially improves athletic performance or stamina or speeds recovery from intensive exertion.

While rhodiola may be only minimally effective as a performance enhancer for athletes, it can be exceptionally useful for students, shift workers, and others who simply need to keep going with everyday life after fatigue sets in.

Rhodiola has been shown to [relieve or reduce many physical symptoms of fatigue](#), including muscle aches and soreness, feelings of tiredness and sleepiness, and headache. It has also been [proven to address many of the cognitive symptoms of fatigue](#), including moodiness and irritability, impaired judgment and decision-making ability, and diminished capacity for mental work.

## Coping with Stress

New studies show that rhodiola is an excellent adaptogen that helps the body achieve systemic balance and return to normal function after exposure to stress. This is an invaluable benefit for users who frequently deal with intense situations, hectic schedules, and high expectations, but it is equally important for those who cope with the “burnout” effect of long-term repetitive work or prolonged periods of stress.

Clinical trials involving subjects with life stress symptoms showed [clinically relevant improvements in all stress symptoms across the board](#), including low energy, headache, muscular aches and discomfort, depression, moodiness, sleep disorders, and more.

In a double-blind, placebo-controlled pilot study involving students taking exams, rhodiola was shown to [substantially enhance general well-being and physical fitness, reduce mental fatigue, and improve scores on a battery of neuro-motoric tests](#). In addition, the students taking rhodiola scored an average of 8.4% higher on their exams than the students taking a placebo.

## Cognitive Enhancement

Research, studies, and clinical trials have repeatedly indicated that rhodiola markedly increases cognitive abilities, including memory, motivation, and capacity for mental work. While this effect is certainly associated to some extent with the reduction of fatigue, many consider rhodiola to be a powerful fatigue-independent nootropic, and its potential cognitive benefits are still being studied.

One of the most intriguing trials involved a group of healthy physicians on night duty over a period of six weeks. The double-blind placebo-controlled study showed that [the participants taking rhodiola outscored those taking placebo on a wide range of complex perceptive functions](#), including associative thinking, short-term memory, calculation, concentration, and perceptive speed, and overall level of mental fatigue.

## Treatment of Depression

Rhodiola has potential as a safe and effective treatment for mild depression. Research is ongoing, but clinical trials indicate that twice-daily doses of rhodiola resulted in a [significant lessening of depression, insomnia, emotional instability and other symptoms](#) in patients diagnosed with mild to moderate depression.

## Neuroprotectivity and Treatment of Neurodegenerative Disease

Several enzymes in rhodiola have potent antioxidant properties. Not only do these enzymes protect neurons against oxidative damage and extend cell life, but they also represent a potential treatment for neurodegenerative disorders like Parkinson's disease, which is characterized by major oxidative stress and neuronal damage. Animal studies indicate that [rhodiola can halt oxidative damage to the cellular mitochondria](#) and thus has potential as an adjunct treatment for Parkinson's disease.

## Other Potential Health Benefits

Though research is ongoing and results remain inconclusive, rhodiola is believed to have potential as a treatment for a wide range of disorders, including [high blood pressure, erectile dysfunction, heart disease, cancer, and longevity](#).

## HOW IT WORKS

Rhodiola's mechanisms of action are still being studied, but it appears to act primarily by modulating a variety of signaling pathways and molecular networks in the brain. It affects this modulation to a large extent via a number of phytochemical components that act as monoamine oxidase inhibitors. This slows the enzymatic breakdown of serotonin and dopamine, neurotransmitters that are associated with mood stabilization, pleasure response, and motivation. Rhodiola is also believed to increase the availability of epinephrine and norepinephrine, both of which are neurotransmitters associated with drive and energy.

Increased levels of these and other neurotransmitters improves neuronal communication and positively impacts mood, reduces fatigue perception, and enhances cognitive abilities. Rhodiola is also believed to expedite the intra-brain movement of monoamines and other neurochemical messenger substances, improving processing and reaction time.

Rhodiola is also known to interact with the HPA (Hypothalamic-Pituitary-Adrenal) system, suppressing the production and release of cortisol, a potentially damaging hormone closely associated with stress. This action in the HPA system is also thought to increase the production and release of beta-endorphins and opiate peptides, which have an anti-depressant action and are associated with stress reduction.

## **DOSAGE**

Rhodiola has been tested and found safe and effective in doses as small as 50 mg daily to as large as 680 mg daily.

Higher doses have not been shown to be toxic but may be ineffective, and many users find that taking rhodiola in a cycle rather than continuously is the best way to prevent a tolerance from forming.

The average effective dose of rhodiola is generally accepted as the range from 340mg to 680 mg daily. Some users find the actions of rhodiola to be very dose-dependent, varying considerably depending on the size of the dose and the time at which it's taken. It works best when taken on an empty stomach, so a 100 mg dose in the morning before breakfast is a good starting point. Maintain this dosage for at least a week to be sure that your body is tolerating it well before adding doses.

The amount of rhodiola you need will depend on a variety of factors, including your age, weight, general health, and other medications you're taking. Why you're taking rhodiola and what you expect from it also play a part in determining dosage; while a single 100 mg dose can effectively improve memory and focus for many users, relieving depression and anxiety can take up to 400 mg daily.

As always, it's wisest to start with the lowest effective dosage and gradually increase as needed.

Rhodiola may interact with other compounds, so if you're taking certain medications or other supplements use rhodiola carefully and monitor the effects.

Consult your doctor before taking rhodiola if you've been prescribed drugs to lower blood sugar or treat diabetes; medicine for the treatment of high or low blood pressure; CNS depressants or stimulants; anti-depressants, including MAOIs and SSRIs; sedatives; heart regulating drugs; and antibiotics.

There is insufficient data on how rhodiola affects infants and children, so it is advised for use by adults only. Pregnant or nursing women should not take rhodiola.

## STACKING

To fully experience ashwagandha's cognitive enhancing effects, it does best when stacked with other supplements.

Have a look at our [All-Natural Nootropic Stack](#) for some inspiration of a stack that contains rhodiola.

## WHERE TO BUY

We recommend [NOW Foods Rhodiola Rosea Capsules](#) that can be found on Amazon.

Another option is to order directly from a reputable specialty supplement vendor such as [AbsorbYourHealth.com](#) where you'll be able to find rhodiola rosea as well as a wide selection of other nootropics.

## SIDE EFFECTS

Rhodiola is generally safe, non-addictive, and well-tolerated by adults taking moderate (50 mg – 680 mg daily) doses for a limited period of time, up to 10 weeks. The most common side effects include mild to moderate dizziness, anxiety, agitation, insomnia, nausea, restlessness, and increased libido. These side effects tend to be dosage-dependent and are more pronounced when larger doses are taken, so it's important to take the minimum effective dosage to eliminate or minimize side effects.

Dosage timing is also important. It's best to take rhodiola on an empty stomach for maximum effectiveness and early in the day to avoid interruptions in normal sleep patterns.

## CLOSING THOUGHTS

Rhodiola is a traditional herbal treatment that has been used as a tonic for centuries, and it is growing in popularity with the nootropics community as science uncovers more of its capabilities.

It's a safe, well-tolerated, and effective fatigue fighter that can keep you going through busy days or long study sessions with no drop in cognitive abilities.

Perhaps even more importantly, it's a powerful adaptogen and reliable neuroprotectant that can help your body fight the adverse effects of the stress that's simply part of modern life.

If you're looking for a supplement that can help keep you at your mental and physical best, rhodiola is a natural nootropic worth considering.





# SULBUTIAMINE

Sulbutiamine is a synthetic derivative of Vitamin B1 that is often supplemented for its nootropic properties. Sulbutiamine is special in its ability to not only enhance memory and focus but to also supercharge mood and motivation.

## SUMMARY

Sulbutiamine is a synthetic version of thiamine, otherwise known as vitamin B1. This unique chemical compound was first developed by the Japanese with the express purpose of reversing the effects of chronic B1 deficiency.

For those of you who may not be aware, a lack of vitamin B1 in your system can lead to acute issues concerning memory, the length of your attention span, your alertness to conditions around you, and even the quality of your overall mood. A profound sense of depression can develop in people who suffer from a lack of B1 in their diet, and this only heightens the dangers that can develop from lack of energy and the proper amount of exercise.

However, the benefits of sulbutiamine appear to exist even when taken by healthy individuals, who aren't deficient in B1.

Supplementing with sulbutiamine has also been demonstrated to have profound nootropic effects resulting in a boost of energy, cognition, and mood.

## BENEFITS AND EFFECTS

The most well-known and remarked upon benefit that sulbutiamine brings is its amazing ability to [improve the memory](#) of people who take it regularly.

People who have taken sulbutiamine on a regular basis have noted a marked increase in their ability to take in and retain information. In other words, they have noticed an improvement in both their short and long-term memory skills. While the exact effects of the process are still being researched, scientists have managed to come up with a working thesis of why this is so.

It seems that the beneficial effects of sulbutiamine are due to the enhancing effect that this substance has on the neurons of the brain, specifically in their basic transmission and communication abilities. This enhancement, in turn, is due to the effects that sulbutiamine produces upon substances that control these vital brain activities, namely glutamate, dopamine, and acetylcholine.

## **Increase Alertness and Energy Levels**

The specific effect that sulbutiamine has on dopamine levels in the human brain is a source of ongoing scientific and medical research. It seems that sulbutiamine stimulates the ability of users to focus their concentration on specific tasks, while simultaneously enhancing their ability to perceive and react productively to events that are occurring around them. For this reason, many users have reported that sulbutiamine is an excellent study aid.

## **Improve Mood and Reduce Anxiety**

Sulbutiamine has also been shown, at least anecdotally, to have a positive effect on a user's general mood, particularly when it comes to reducing anxiety. Again, this is due to the ability of sulbutiamine to stimulate the levels of dopamine in the brain. It seems that the increased ability to focus and concentrate on one's tasks and general surroundings leads naturally to an improvement in mood.

As a result of this increased focus and concentration, it follows that people who regularly take sulbutiamine tend to report radically decreased levels of general anxiety and nervousness, particularly in social situations that were formerly a source of great misapprehension and fear. In fact, the ability of sulbutiamine to relieve stress and anxiety in this regard forms yet another portion of the ongoing scientific and medical research surrounding this substance.

## **HOW IT WORKS**

Sulbutiamine has long been classified as a synthetic version of Thiamine, precisely because it emulates the positive effects that are associated with vitamin B1. Perhaps the chief reason that many people prefer sulbutiamine to genuine thiamine is that it crosses the blood-brain barrier much more easily, giving rise more quickly to even stronger results.

Once the blood-brain barrier has been crossed, sulbutiamine has an immediate effect on the cholinergic, glutamatergic, and dopamine receptors that influence such vital activities as concentration, memory, and mood. Because sulbutiamine is extremely fat soluble, it circulates widely and rapidly throughout the brain and body, making its presence known very quickly by the scope and magnitude of its resulting effects.

## **DOSAGE**

A precise definition of the correct dosage of sulbutiamine is practically impossible to offer on a generalized basis. How much or how little (or any at all) of this substance you need to realize its positive results will depend on a number of factors. These factors include your natural biochemistry and metabolism, as well as your general level of health and “tolerance” for prescribed medications.

In addition, other supplements you may be taking at the moment might have a positive or negative effect on just how effective sulbutiamine is for you. Before you even consider taking sulbutiamine, you should consult with a doctor to determine whether this supplement is right for you.

The average recommended dosage of sulbutiamine will normally vary between a level of 400 and 800 mg, not to be exceeded within a period of 24 hours. Once you have ascertained the dosage level that is right for you, you can begin taking the supplement immediately.

Whether you take sulbutiamine in bulk or pill form, you should note that sulbutiamine is fat soluble, rather than water soluble. This means that, although sulbutiamine works most rapidly when taken with a liquid, it is not capable of being mixed with the usual juices (apple, orange, and the like) that are associated with the consumption of health supplements and instead should be taken with a fat source such as oil or milk.

If you do decide to take sulbutiamine it is important to note that tolerance can set in as quickly with its positive effects beginning to diminish sometimes in less than a week. That is why it is recommended to either cycle sulbutiamine or to save it specifically for days that can use that extra boost.

# STACKING

If you've read this far, you may well be wondering what supplements sulbutiamine best stacks with, in order to achieve the maximum positive effects.

## Sulbutiamine + Huperzine A + Choline Stack

While one's mileage may vary, a "starter's stack," consisting of sulbutiamine, Huperzine A and a choline source such as Alpha GPC may be a good start.

### 1-2x per day

- ▢ 400 mg [Sulbutiamine](#)
- ▢ 200 mcg [Huperzine A](#)
- ▢ 300 mg [Alpha GPC](#)

Huperzine A is a supplement that is derived from the common herb known as Irish Moss. It works by slowing down the decomposition of acetylcholine. By ensuring an optimal level of this vital organic molecule, huperzine A helps to increase your ability to focus and concentrate. Meanwhile, choline works in concert with Huperzine A and sulbutiamine to ensure maximum memory power and capacity for concentrated attention. When it comes to pure concentrated choline content, Alpha GPC has the edge, as it contains 40 percent by weight. However, for individuals who are also seeking a supplement to augment their capacity for motivation, as well as provide relief from anxiety, citicoline may be the better choice, due to its effect on the dopamine receptors in the brain.

## Sulbutiamine + Aniracetam + Choline Stack

Sulbutiamine also stacks well with the racetam class of nootropics. Among the racetams, stacking sulbutiamine with aniracetam is a common choice due to aniracetam's similar effects on cognition and mood, really enhancing overall effects.

### 1-2x per day

- ▢ 400 mg [Sulbutiamine](#)
- ▢ 800 mg [Aniracetam](#)
- ▢ 300 mg [Alpha GPC](#)

## SIDE EFFECTS

One of the primary sources of the continuing appeal of sulbutiamine is its relative lack of potentially harmful side effects. Perhaps the most common side effect is an increase in anxiety and irritability. There have been a few reports of nausea however these reports are minimal. However, it should also quickly be added that these particular side effects tend to appear after much larger than normally recommended doses of the supplement have been ingested.

As can perhaps be surmised after reading the previous sentence, it is also true that some users of sulbutiamine do tend to develop a tolerance for the supplement. This increased tolerance can lead to users feeling the need to use higher dosages to continue experiencing its benefits.

However, despite this evidence and the strong recommendation that users who notice themselves gaining a higher tolerance for sulbutiamine stop taking it, there is no general consensus on the part of medical experts as to whether the supplement is habit forming. As noted above, however, it is recommended that you discontinue using it if you do notice any increase in your general tolerance.

## WHERE TO BUY

Sulbutiamine is available in two distinct forms: capsules and bulk powder. According to your preference and budget, you may choose either of these two. Buying the supplement in loose bulk form is much cheaper than capsules, but if you find capsules more convenient the option exists.

We recommend [Double Wood Sulbutiamine from Amazon](#).

Alternatively, we recommend purchasing sulbutiamine and any other nootropics from [AbsorbYourHealth.com](#) as they are a reputable source for supplements.

## CLOSING THOUGHTS

As has been demonstrated, sulbutiamine is a powerful and proactive supplement that is steadily increasing in popularity and usage. While much of the claims made on its behalf have yet to be verified via the proper scientific and medical research, many nootropic users all over the world swear by sulbutiamine's positive effects.



# SUNIFIRAM

Sunifiram is an exciting new development in the world of nootropics; a derivative of the racetams, it's believed to deliver similar memory, learning and mood enhancing benefits in a much more powerful package. Though much remains to be learned about this new supplement, initial studies are promising and many users consider it an outstanding addition to their nootropic routine.

## SUMMARY

Sunifiram, also known as DM-235, is one of the most exciting new developments in nootropics, providing a very powerful cognitive boost along with mood and energy enhancement.

First synthesized in 2000, sunifiram is a very recent discovery and only a limited body of research is available to date, but preliminary animal studies indicate that it's an effective nootropic proven to improve learning and memory.

First synthesized in 2000, sunifiram is a very recent discovery and only a limited body of research is available to date, but preliminary animal studies indicate that it's an effective nootropic proven to improve learning and memory.

It is also believed to be a potential treatment for a variety of neurological disorders including Alzheimer's disease, Parkinson's disease, and amnesia.

No serious side effects have been identified, though research is ongoing. There have been no documented studies or clinical trials involving humans, but animal studies suggest that sunifiram is both safe and well tolerated and may be even less toxic than racetam nootropics.

Sunifiram is a derivative of the racetam family of nootropics but has a different chemical structure and is classified as a piperazine alkaloid rather than a racetam. It delivers many of the same memory and learning enhancements as piracetam but is as much as 1000 times more potent. Sunifiram is also an ampakine, a compound that interacts with the glutamatergic AMPA receptors to boost the activity of the neurotransmitter glutamine, and as such may deliver significant mood and energy improvement as well as cognitive benefits.



## BENEFITS AND EFFECTS

- **Learning and memory:** Sunifiram has been proven to act as a powerful nootropic, delivering measurable improvements in learning speed, memory retention, and recall. Animal studies showed that [sunifiram not only enhanced performance in learning tasks, it actually reversed chemically-induced amnesia.](#)
- **Improved focus and motivation:** Sunifiram users frequently report that it gives them better focus and concentration and improves their motivation to both tackle and complete mental tasks, and animal studies tend to bear this out. The focus and motivation enhancement effects could be attributable in part to the fact that sunifiram facilitates the release of acetylcholine, the neurotransmitter most closely associated with cognitive ability.
- **Anxiety and depression management:** Though animal studies don't suggest that sunifiram acts as an anti-depressant or anxiety reliever, some users report that it has these effects. These effects may be explained at least in part to its actions as an ampakine, or compound that interacts with the glutamatergic AMPA receptors and acts as a mild stimulant.
- **Mood and energy booster:** Many users report that sunifiram gives them more energy and a brighter, generally happier outlook.
- **Visual/perceptual enhancement:** While user reports of visual and perceptual improvements are far from universal, many people say that taking sunifiram gives them a brighter outlook in a very literal sense, making light and shadow more pronounced and colors more vibrant. For some people, it also makes music more mentally engaging and emotionally meaningful.
- **Increased sex drive:** A significant percentage of users report that sunifiram has distinct and noticeable aphrodisiac properties, increasing their interest in sex. This effect doesn't appear to be universal and has not been replicated in animal studies.

## HOW IT WORKS

Though sunifiram is a piracetam derivative, it has a different chemical structure from the racetams and is chemically classed as a piperazine alkaloid. It is known to work in two ways, both as an ampakine that stimulates the activity of glutamine receptors and as a cholinergic that increases the production and release of acetylcholine.

Like many nootropics, sunifiram's precise mechanisms of action are not entirely understood. However, it is believed that its primary action is that of an ampakine, which means that after crossing the blood-brain barrier it binds to AMPA-type glutamate receptors in the brain. This stimulates the production of glutamate, a vital neurotransmitter that plays the pivotal role in neural activation.

Glutamate is an excitatory neurotransmitter that is crucial to synaptic plasticity, or the ability of nerve synapses to respond to increases or decreases in activity. Adequate levels of glutamate are essential to long-term potentiation, or lasting increase in signal strength between neurons. Glutamate levels are of particular importance in the hippocampus, the part of the brain that plays the primary role in both spatial navigation and the formation and storage of memory, and it is believed that much of sunifiram's cognitive enhancement ability is ultimately accomplished by improving neural signal strength in this part of the brain.

In addition to enhancing memory formation and recall, ampakines also generally act as mild stimulants that increase alertness and energy but without the restlessness and other adverse side effects associated with caffeine, methylphenidate (Ritalin) and amphetamines.

Sunifiram is also thought to act as a cholinergic, increasing the production and release of the neurotransmitter acetylcholine. Though the exact process by which this occurs has not been identified, an Italian animal [study showed that tests using piperazine compounds such as sunifiram had a cholinergic effect similar to that of piracetam.](#)

Acetylcholine is closely associated with most aspects of cognition, including memory, learning speed and ability, and fluid intelligence or capacity to solve unique problems without relying on learned behaviors. Most nootropics work at least in part by increasing the availability of acetylcholine, either by stimulating acetylcholine receptors or by directly supplying its precursor choline which is then synthesized into acetylcholine.

## **DOSAGE**

To date, the only documented sunifiram studies involved animals rather than human subjects making it difficult to make clinically-backed recommendations on dosage. However, it is known that sunifiram is much more potent than other

racetams, with one study showing that [sunifiram is about 1000 times more potent than piracetam](#).

Sunifiram requires a much smaller dose than racetams for effectiveness. Based on a combination of user reports and information gained from animal studies, a dosage of 5 to 10 mg taken a maximum of three times per day is typically considered both safe and effective. Sunifiram is best taken sublingually for maximum absorption.

It is always wise to start with the smallest possible effective dosage of a new supplement and increase gradually as needed, and that advice is particularly pertinent to sunifiram. Not only is it a new drug on which no human trials have been documented, large doses could have unpleasant side effects including overstimulation and brain fog.

In addition, tolerance to sunifiram may build rapidly. Some users recommend cycling it with other nootropics to avoid this effect.

## STACKING

Sunifiram can be stacked with other nootropics, but users are cautioned to be both careful and conservative about sunifiram dosages in combination with other potent supplements, particularly until they're sure how they react to sunifiram.

**Stacking for enhanced cognitive effects:** This is possibly the most common type of sunifiram stack and is best accomplished by pairing sunifiram with one or more of the racetams like piracetam, oxiracetam, or Noopept. Because racetams make a powerful draw on the brain's choline stores, it's important to add a good choline source like CDP choline, Alpha GPC, or centrophenoxine to this type of stack.

**Stacking for mood enhancement:** Aniracetam is known to stack well with sunifiram for mood enhancement. L-theanine, which enhances production of dopamine, serotonin, and GABA and acts as glutamine reuptake inhibitor, also stacks well with sunifiram. Sulbutiamine, which potentiates cholinergic, dopaminergic, and glutamatergic transmission, is another good addition to this type of stack. As always when a racetam supplement is used, a good choline source is important both as a potentiator and to prevent headaches and other unwanted side effects.

## SIDE EFFECTS

To date, no serious side effects of sunifiram have been documented, but it's important to remember that no human studies or clinical trials have been conducted.

Information from animal studies indicates that it is both safe and well tolerated, and even doses many times higher than the effective dosage range have not been proven toxic.

User-reported side effects are both minor and temporary and include an increase in body temperature, increased perspiration and salivation, headache, nasal stuffiness, increased sensitivity to visual and audio stimulation, and insomnia.

## WHERE TO BUY

Sunifiram is a difficult nootropic to find and can only be purchased from a select few vendors. We recommend that you buy Sunifiram from [PeakNootropics.com](https://PeakNootropics.com) because they are a reputable source of nootropic supplements.

## CLOSING THOUGHTS

Sunifiram is one of the most exciting and promising new nootropic supplements, delivering robust cognitive, mood, perceptual, and energy benefits in an ultra-concentrated and potent form.

While it isn't as known as some of the more traditional nootropics, many users consider it a favorite and use it regularly, but it's not a supplement to be taken lightly or consumed carelessly due to the lack of research. Though animal studies conducted over the past 15 years show it to be safe, well-tolerated, and non-toxic, it's important to remember that no human studies have been documented and much remains to be known about this powerful supplement.

For users who bear in mind that this is a new and to some extent unknown supplement, taking it responsibly and carefully monitoring its effects, sunifiram can be an excellent addition to the nootropic routine.



# VINPOCETINE

Vinpocetine is a biosynthetic nootropic that acts as both a brain booster and neuroprotectant. It's known for enhancing cognition, sharpening memory, and even improving mood, and it's safe, well-tolerated, and free of side effects. Vinpocetine is new to many nootropic users, but for anyone who's interested in thinking and feeling better it's definitely worth a second look.

## SUMMARY

Vinpocetine is a unique supplement that enhances memory, mood, and cognition in a variety of ways. It improves cerebral blood flow and circulation, it increases the absorption of oxygen and nutrients, it boosts the production of crucial neurotransmitters, and it acts as an antioxidant, protecting the brain from the negative effects of stress, environmental toxins, and the aging process.

A semisynthetic derivative of the Periwinkle plant, vinpocetine was first isolated in Hungary in 1975. It has been mass produced there as a prescription drug since 1978 and is used throughout Eastern Europe as a treatment for cerebrovascular disorders and age-related memory impairment. It is not regulated as a pharmaceutical in the US, where it is sold as a dietary supplement.

Though there have been limited clinical trials of vinpocetine, it has proven to be an effective vasodilator with direct and specific effects on the brain. It has also been shown to improve cerebral metabolism, and these factors are the basis of vinpocetine's nootropic capabilities. It has also been shown to be a potent anti-inflammatory agent and is believed to have potential as a treatment for Alzheimer's disease, Parkinson's disease, and other age-related neurodegenerative conditions.

Vinpocetine is usually very well tolerated, and it works efficiently both on its own and in combination with other supplements. Though it's less well-known than many other supplements, it has tremendous potential for both anti-aging and cognitive enhancement and is gaining a positive reputation as a safe and effective nootropic.

## BENEFITS AND EFFECTS

Vinpocetine's actions as a vasodilator and anti-inflammatory agent make it a powerful and effective nootropic, enhancing cognition by improving the overall health and efficiency of the brain.

- ▣ **Memory Improvement:** Vinpocetine is widely recognized for its ability to sharpen memory, and it is in fact prescribed throughout Eastern Europe as a treatment for memory disorders. A series of clinical trials suggest that vinpocetine can improve memory formation in older users with memory impairments, and users report that vinpocetine helps them recall learned information more quickly and accurately. Studies also demonstrate its [memory boosting abilities in healthy individuals](#).
- ▣ **Better focus and concentration:** Vinpocetine has been shown to act as a limited-action vasodilator, increasing blood flow and circulation in the brain without affecting blood pressure in the rest of the body. This action is at the heart of vinpocetine's nootropic capabilities; increased blood flow and circulation improve the overall health and efficiency of the brain, which in turn creates better focus and concentration and lengthens attention span.
- ▣ **Faster learning and better mental clarity:** Vinpocetine is also believed to improve the body's ability to convert dietary glucose and lipids to adenosine triphosphate or ATP, the cellular coenzyme that transports chemical energy for metabolism. The more ATP available for use in the brain, the better the intellectual capacity, and the faster learning can take place. The presence of ample ATP in the brain reduces feelings of mental fatigue or "brain fog" and enhances feelings of mental clarity.
- ▣ **Mood enhancement:** Studies suggest that vinpocetine encourages increased production of many essential neurotransmitters, the brain chemicals that enable the transfer of nerve impulses. Making more neurotransmitters available for use in the brain not only enhances learning and cognitive abilities but may also [improve mood, reduce anxiety, and increase perceived well-being](#).

## HOW IT WORKS

Early studies indicate that vinpocetine has a number of effects on the brain, the most important of which is enhancing blood circulation and oxygen utilization. Unlike ephedrine and other general stimulants that act as whole body vasodilators,

vinpocetine increases blood flow in the brain without affecting circulation or blood pressure throughout the rest of the body. It has even been shown to specifically target damaged brain cells and areas of poor circulation within the brain.

The increased blood flow and related oxygenation of the brain tissue make the brain more tolerant of ischemia and hypoxia, states of reduced and insufficient oxygen related to stroke and other brain pathologies and injuries. In healthy brains, the increased blood flow and related oxygenation are believed to have a significant nootropic effect.

In addition, improved circulation and oxygenation in the brain tends to improve overall brain function with increased production of the coenzyme ATP, which is essential for cerebral metabolism. By creating a sufficiency of ATP vinpocetine increases the efficient usage of glucose and other brain nutrients and thus improves mental clarity.

Vinpocetine has also been shown to interact with sodium, calcium, and potassium ion channels in the brain, modulating the release of various neurotransmitters including acetylcholine, noradrenaline, serotonin, and dopamine. By increasing the availability of these neurotransmitters vinpocetine not only affects memory and overall cognition but may improve mood by alleviating feelings of anxiety and enhancing the sensation of energy and well-being.

Vinpocetine also acts as an anti-inflammatory agent in the brain, reducing the expression of the proinflammatory and vascular cell adhesion molecules that can lead to neuronal death in conditions such as Alzheimer's and Parkinson's diseases. The anti-inflammatory properties of vinpocetine make it a promising neuroprotectant that could potentially have significant anti-aging benefits.

## **DOSAGE**

Dosages of 15 to 30 mg, divided into three daily doses, are typical, with most users reporting maximum benefits with doses at the upper end of that range. Like many other nootropics, vinpocetine has frequently been shown to follow a dose-response curve in which benefits decline when too-large doses are taken; benefits peak at maximum dosages of about 40 mg daily, though results vary from user to user.

For an immediate cognitive boost, to be taken on demand, anecdotally users report the best results when taking 20-30 mg in one dose.



Another user-dependent variable is the amount of time it takes for the benefits of vinpocetine to be observable. Many users report feeling an improvement in cognitive abilities, energy, and mood within hours of taking vinpocetine, while others say the benefits only become noticeable over weeks or even months of regular dosage.

## STACKING

Vinpocetine can be an effective nootropic taken alone, but it is known to work very well in combination with other nootropics and is often found in preformulated supplements. If you prefer to make your own nootropic stack, here are some ideas for a good starting point.

### Vinpocetine and Ginkgo Biloba Stack for Long-Term Cognitive Enhancement

Vinpocetine and Ginkgo Biloba act as potentiators for each other, with the combination of the increasing the overall potency and effectiveness of both. This simple stack will boost cognitive abilities, improve mood, and increase motivation and productivity.

#### 3x per day

- ▢ 5 mg [Vinpocetine](#)
- ▢ 50 mg [Ginkgo Biloba](#)

### Vinpocetine and Racetam Stack for Studying

This stack will make the most of intensive study time; the piracetam will work with the vinpocetine to improve general cognition, the aniracetam will boost memory, and the Alpha GPC will ensure sufficient high-quality choline for transformation to acetylcholine, the “learning neurotransmitter.”

#### 2x per day

- ▢ 1 g [Piracetam](#)
- ▢ 200 mg [Aniracetam](#)
- ▢ 5 mg [Vinpocetine](#)
- ▢ 300 mg [Alpha GPC](#)

## SIDE EFFECTS

Vinpocetine is extremely well tolerated, and no significant adverse side effects have been reported. New users may experience a mild version of a caffeine “buzz” that subsides as tolerance to vinpocetine increases. Increasing daily dosage to more than 40 mg may diminish noticeable benefits.

## WHERE TO BUY

Luckily, vinpocetine is quite easy to get your hands on and conveniently can be ordered online. We recommend [Life Extension Vinpocetine](#) from Amazon for its beneficial effects on the brain’s memory abilities.

Vinpocetine can also be purchased from [AbsorbYourHealth.com](#), our recommended source for specialty nootropics.

## CLOSING THOUGHTS

Vinpocetine’s unique mechanisms of action, powerful cognitive enhancement capabilities, and promise as a brain protectant are sparking interest throughout the nootropic community.

It’s a reliable brain booster on its own, and it works very well with other supplements, making it an excellent addition to most stacks; it’s also safe, affordable, and readily available.

If you’re interested in thinking and feeling your best while keeping your brain working at maximum efficiency, vinpocetine is a supplement worth considering.